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The Impact of Student-Centered Coaching on the Implementation of Project-Based Learning: An Action Research Study

Wanda Nicole Littlejohn

THE IMPACT OF STUDENT-CENTERED COACHING ON THE IMPLEMENTATION OF PROJECT-BASED LEARNING: AN ACTION RESEARCH STUDY

by

Wanda Nicole Littlejohn

Bachelor of Science
Winthrop University, 2000

Master of Science
University of North Carolina at Charlotte, 2002

Master of Education
Clemson University, 2009

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Accepted by:

Susan Schramm-Pate, Major Professor

Cathy Brant, Committee Member

Richard Lussier, Committee Member

Suha Tamim, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

DEDICATION

I would like to dedicate this dissertation to my supportive family. They have been very supportive of me furthering my education and have never stopped believing in my abilities.

To my son, Carlos Jermaine Littlejohn II, you have been the son that every parent desires to have. You have allowed mommy to do her school work and you have been the light that shines in my house during those long nights and early mornings. I pray that all of your dreams come true.

To my parents, Daniel and Ruth Holmes, you have been very supportive of my work. You have been there for me throughout this entire process and anything that I have needed you have been willing to provide.

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Thank you all for asking about my progress, checking in on me, and keeping my son when I needed to have time to do school work. I am thankful for having a loving family who takes care of each other.

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I would like to thank my school district and school for allowing me to conduct my research study. My colleagues have played a large part in shaping me as an educator and we have learned a lot from this study. It is my belief that this work will continue and will make a large impact on how we educate students in our building.

I would like to thank my friends for always checking in on me and making sure that I was okay. Cohort G has been a tremendous help in my educational experience at USC. Thank you for responding to my discussion posts and pushing my thinking.

ABSTRACT

The present study describes a student-centered in-service that was implemented with four new teachers. The purpose of the study was to determine the level of confidence the four teachers felt after the coaching sessions. The study took place with teachers who teach in a high poverty school located in Greenville, South Carolina. The teacher-researcher is an Instructional Specialist at the school and she designed a project-based (PBL) learning unit with the teachers for ninth-grade students that was used in the coaching sessions in the fall of 2018. Data sources include: focus group interviews with the teachers; observations in the form of journaling during the coaching sessions, observations in the form of field notes during class periods, and a survey. The four teacher-participants reported feeling "more confident" implementing a PBL unit with high-poverty ninth-grade students and that "more time" was needed to plan future PBL units. An action plan includes school level planning with the school's instructional coach to develop authentic learning experiences for all students in the school.

Keywords: integrated classroom, student-centered coaching model, project-based learning, scaffolding

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INTRODUCTION

Finding a curricular model that offsets the damaging effects poverty brings into a child's life has been difficult for Monarch High School (pseudonym) (MHS), however, since the implementation of project-based learning (PBL) in 2014, the move from traditional teaching and learning has been beneficial for the students. Project-based learning is known to enhance a students' ability to collaborate and problem solve, which are skills needed for life after high school. Additionally, PBL provides a relevant and authentic classroom experience for students, especially needed for students who come from impoverished living situations (Creghan & Adair-Creghan, 2015). Providing purpose, a real world connection, and chances to work with experts from industry, PBL is an ideal instructional model for students who may find it difficult to learn in a traditional classroom setting. Since the beginning phases of implementation of project-based learning, classroom observation data at MHS supports varying differences in how teachers plan and implement the PBL curriculum. Additionally, since 2014 over 50% of the teaching staff has changed and very few teachers have been fully prepared to understand PBL which makes it challenging to implement with fidelity. The present study's teacher-researcher is MHS Instructional Specialist. The four teacher-participants are new to implementing the PBL curriculum model and participated in a new coaching model for eight weeks as a form of professional development.

Background – School Community and District

Greenville, South Carolina, is situated in the Piedmont region in the foothills of the Blue Ridge Mountains, also known as the Upstate of SC. As reported by the 2010 census data, Greenville County has more than 451,219 residents, a 10.0% increase since the 2005 census. Greenville County, once a textile giant is one of the most economically diverse areas in South Carolina. For example, Greenville has experienced tremendous success in recruiting top tier corporations such as Michelin, General Electric, Hitachi and BMW to the region. Because of these companies' interest in the area, it is imperative for individuals to be prepared to work in these types of environments.

Monarch High School (MHS) is one of 14 high schools located in this region of SC. According to 2010 census data, the average per capita income for the families around the school was $36,296, while 21.5% of families reported $14,999 or less (census.gov, 2010). Residents reported ethnicity as 23% White, 43% African-American, 33% Hispanic and 0.4% Asian (census.gov, 2010). Even though the Upstate is thriving economically, MHS is situated in an area where industry is scarce, families are poor, and only 40% of adults are high school graduates (census.gov, 2010). According to the data, most individuals lack the skills needed to work in the manufacturing companies that exist in the area.

Due to the strict laws mandated by NCLB and South Carolina's Elementary and Secondary Education Act (ESEA), MHS has struggled to meet the requirements and was categorized as underperforming for seven consecutive years—the need for change was imperative. Catapano and Gray (2015) state "there are so many overwhelming challenges facing the families and children who attend urban schools that it is difficult to

know where to begin" (p.1). In 2015, Every Student Succeeds Act (ESSA) replaced NCLB and began an initiative where the state of SC created a single accountability system. The goal of this accountability system is for all children to have a high-quality education that is equitable and fair and one that prepares students to enter postsecondary education, certification programs, or be career-ready (SC.gov, 2016). There are several components to ESSA and those components each have requirements for schools. Act 94 creates an expectation for high school graduates to exhibit certain characteristics upon leaving high school and will eventually require 70% of students to earn a 70% or higher on the state End-of-Course exams (SC.gov, 2016). Located in an area of the school district where 99% of the students attending are living in poverty, has created obstacles where the school's test scores are consistently low and students constantly drop out for various reasons. These difficulties continue to further perpetuate the problem of having individuals in the school's neighborhood who lack the skills they need in order to get better paying jobs or the jobs situated in the area.

Phenomenon Under Investigation

In 2013, New Tech Network (NTN) was presented to the school by the district's curriculum directors as an instructional intervention to break the cycle of low standardized test performance and graduation rates. NTN has created a framework for implementing Project-Based Learning (PBL) and consists of over 130 schools located in over 20 states in the United States as well as in Australia. After visiting several schools in the network over at 12-month period, including schools with low Socioeconomic Status (SES), and seeing the positive changes and impacts made on students, the Administrative team decided to join the New Tech Network in 2014. Educational

researchers Mosier, Bradley-Levine, and Perkins (2015) study the NTN framework for inquiry-based educational initiatives and explain in their article:

> This model consists of three key elements: (1) the utilization of PBL as the teaching and learning approach, a focus on students solving real-world problems, and the cultivation of community–school partnerships; (2) the development of an empowering culture of "trust, respect, and responsibility" whereby students and teachers make meaningful contributions to school policy and learning; and (3) an emphasis on technology integration through one-to-one computing ratios, Internet access, and the use of a learning management system that allows students to be self-directed learners and teachers to be effective learning facilitators. (p. 1)

The New Tech Network prides itself on having schools with higher graduation rates, high levels of career-readiness achievement, higher percentages of students going to college, and higher percentages of students being successful in college (PR Newswire US, 2017). Creating a learning environment where students are prepared to not only take state standardized tests but be prepared for life after high school was the type of school Monarch High School's Administration wanted to create. The teachers have been challenged by the academic and emotional needs of the students, but they seek to find an approach that not only addresses those needs but also provides unique learning opportunities for students and NTN provides a platform to do just that.

The New Tech Network provides intensive professional development (Carr, 2017). However, for many teachers it is not easy to understand how to shift from traditional teacher-centered instruction to the student-centered approach necessary for PBL implementation (Gerdes, 2015). Additionally, with so many new teachers entering

the building each year, it is arduous for NTN to provide the building level professional development teachers need. As the Instructional Specialist and provider of professional development at the building level for teachers, it is imperative to understand what types of supports need to be put in place in the building that can be ongoing for teachers to implement PBL with fidelity.

PBL has been used as a vehicle to develop student empathy and compassion where they participate in activities that help them engage with the local community (Fox, 2010). Even though the staff has changed at a high rate since implementation, the students at MHS have participated in projects that bring the community to the school and additionally, most have learned how to be better self-advocates, oral communicators, and collaborators. PBL has offered MHS students the opportunity to participate in service learning projects where they get to see poverty outside of the school while they formulate a plan to make a difference and improve someone else's conditions. MHS students have worked with the local Junior Achievement program to create workshops for high school students in the Greenville area. MHS students in the Environmental Science classes have partnered with a local park to help enhance the sustainability of its vegetable garden. MHS students are figuring out how to work with their peers and hold each other accountable in the classroom through collaborative group work. Cindy Landrum (2018) reports that companies such as BMW, Michelin, and Fluor are looking for employees with both soft skills and technical skills. The senior engineering students at MHS created devices in which they presented their work to individuals in these companies. Even though MHS is located in an area where many individuals are not prepared to work for the aforementioned companies, the NTN model for project-based learning

implementation is already showing that our students are obtaining the right preparation to be college and career ready.

Although it there has been evidence of the PBL curriculum model making a difference in student learning and development, some of the adult learners in the building still need assistance with how to create standards-driven projects while simultaneously providing real world experiences for students, especially as it relates to students living in poverty. The purpose of this study is to investigate teacher perceptions of the types of support needed in the building to truly implement PBL so students gain a deep understanding of content while concurrently making connections with topics and problems that exist in our world.

Background of the Problem of Practice

Monarch High School (MHS), a school with 100% of the population on free and reduced lunch, is currently in year five of the implementation of the project-based learning model. English and Kitsantas (2013) assert, "The student's role in PBL is to take responsibility for their learning and make meaning of the knowledge and concepts they encounter" (p. 131). However, the teacher's role is to facilitate this type of learning through structured activities that stimulate motivation and promote reflection as well as provide the project's purpose, meaningful scaffolding, feedback, guidance, and prompts for thinking. Because of the high teacher turnover rate and through multiple classroom observations over the past four years at MHS, I have observed as the Instructional Specialist that there is a need for more teacher support in order to further enhance the implementation of PBL with the low SES population at MHS.

Students in this low SES school also need to be able to connect the task to the content associated with the project so they find relevance and purpose while completing their project. Famed educator John Dewey addressed the "continuity of learning" (1938), where continuity makes experiences better for students so they see how activities and content areas work together. As a result of the project, students need to have a full understanding not only of the content/standards, but also how the project can help them with being college and career ready.

Parrett & Budge (2015) suggest that when working with students from high poverty areas, schools should provide equity through the access to the same high-level curriculum and pedagogical approaches as their wealthy peers. The authors also note curricula should be "relevant and meaningful to our students' lives and draw on their own experiences and surroundings" (para. 4). Project-based learning offers a learner-centered instructional delivery method and attaches relevance to content which ultimately increases student engagement and interest in school (Creghan & Adair-Creghan, 2015). Increasing student interest in school at MHS will benefit our students greatly and eventually increase the school's graduation rate and the number of students that are prepared for college and/or careers. This provides additional reasons for why it is imperative for teachers to learn how to implement this method effectively.

Problem of Practice

There is a need for me to improve my practice as an Instructional Specialist at Monarch High School in order to prepare teachers of ninth-grade students to develop curriculum and pedagogy for project-based learning units of instruction that have authentic learning experiences and assessments for southern low socioeconomic status

(SES) students. There is also a need for me and the teachers to work together to ensure the students can see the connection between the project and how it prepares them for life after high school.

Purpose of the Study

The purpose of the action research study is to determine teacher-participants' perceptions of a professional development approach that enables them to develop lessons within a project-based learning format geared toward our local and particular student population at Monarch High School. During the professional development sessions, the teacher-researcher assisted teacher-participants with the planning on an authentic project containing purposeful scaffolding tasks and assessments for students within the project. In my professional opinion as the Instructional Specialist, the teacher-participants in my PBL environment need to understand how to let the students and their work drive the project, which is one of the premises of the New Tech Network's PBL model. Because of this need and as the Instructional Specialist, the secondary purpose of the study is to improve my pedagogical strategy with teachers in the school.

Research Question

What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?

Ethical Considerations

Before conducting the action research study, the teacher-researcher met with the entire team of teachers to discuss the findings from observation data of their classrooms and to discuss the need for an action research study. Working with the team of teacher participants, we discussed strategies for addressing the observed problems and the norms for how we worked together. Permission from the teacher-participants was received by

the teacher-researcher prior to the start of the study. Trust was gained by the teacher-researcher by being consistent with the weekly schedule set by the team, completing tasks assigned, and consistently being an active listener in the group.

When considering the action research plan, it was imperative to provide the same style of intensive coaching to both pairs of teachers, therefore we planned together as a whole group team. As the Instructional Specialist to the school, providing professional development and coaching teachers is a natural part of the day-to-day tasks, but oftentimes, other responsibilities hinder the ability to provide intensive coaching to teachers. Dana and Yendol-Hoppey (2014) proclaim that when teachers engage in classroom action research "they are engaging in a process that is natural and normal part of what good, ethical teaching is all about" (p. 148). Aside from the other duties assigned at the school, engaging in this action research study placed the teacher-researcher back into the major role of teaching teachers.

Being a school where all teachers participate in implementing project-based learning, the teacher-researcher feels it is necessary to provide intensive coaching to all teachers in the building. "Teacher researchers are teachers first. They respect those with whom they work, openly sharing information about their research. While they seek knowledge, they also nurture the well-being of others" (Hubbard & Power, 1999, p. 64). The teacher-researcher executed this action research study to further guide teachers through their journey of project-based learning implementation. In order to provide this guidance as both an inside voice and an external voice simultaneously, it was necessary for the teacher-researcher to observe each classroom, record field notes, and bring the field note data to the team during planning sessions as a form of student data.

Limitations

When considering this action research study, it is clear that there are several potential weaknesses associated the methodology. The first limitation to be considered is the fact that this study must be completed as a quasi-experimental study due to the inability to randomize the teacher participants or the students inside each classroom. Consequently, it is a possibility that selection bias can impact the results of the study. It is assumed, however, that both teacher groups have the same level of cognitive ability and that their understanding after professional development and coaching sessions is at the same level. Another limitation of the study occurs when classroom observations are conducted, it will be difficult for the teacher-researcher to capture every event that occurs in the classroom and therefore, some details may be missed, especially during the time where the teacher-researcher was the researcher-participant.

Due to time constraints, there are certain delimitations of the action research study that cannot be avoided. There may not be time within the eight-week time frame to replicate the study beyond the group of four teachers. The coaching sessions take time as well as observing and providing quality feedback to teachers. After the coaching cycle was complete, it was imperative that the teachers had a follow-up session to ensure there was time for reflection and learning. As a result of this time constraint, the study will not move past the Digital Literacy team.

Additionally, the focus group interview and each coaching session included questions for teachers to answer created by the teacher-researcher. As the teacher-researcher, I provided coaching based on what the teachers needed in order to improve

classroom instruction, therefore, each teacher team needed different assistance during a coaching session. During the classroom observation time, the teacher-researcher asked students questions created by the teacher-researcher.

Overview of the Study

Chapter One of this dissertation has provided an overview of the research study including pertinent information about the research site and the evolution of the use of project-based learning as a curriculum model. A problem of practice with PBL implementation in the school was discussed as well as the developed research question the action research study was designed to answer. Additionally, the data sources collected during the study was referred to.

In the coming chapters of this dissertation, a review of the literature provides a theoretical framework for the project-based learning pedagogical model as well as the model in which the New Tech Network operates. Additionally, aspects of professional development models are discussed. Chapter three includes a layout of the methods used to conduct the action research study and chapter four provides the data and the analysis of the data collected during the study. Chapter five provides a summary of the study and an action plan developed by the teacher-researcher and teacher-participants that outlines next steps that can be taken at Monarch High School to further improve the quality of PBL implementation in classrooms. Following chapter five is a list of references used in the study and appendices.

Glossary of Key Terms

There are several terms discussed throughout this Action Research that need to be defined for further understanding.

Driving Question. A question posed at the beginning of the project that serves to organize and drive activities of the project, provide a context to which students can use and explore learning goals and scientific practices, and provide continuity and coherence to the full range of project activities. As students work through the project, they are actively pursuing the answer to the question. (Krajcik & Blumenfeld, 2006).

Free and Reduced Lunch. Federally assisted meal program that offers nutritionally balanced meals at low or no cost for children in schools. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals and those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals at the cost of no more than forty cents. (fns.usda.gov, 2016, August 18)

Integrated Classroom. A classroom where two different content teachers plan together to create projects that use standards from both subjects.

Intense Coaching Model. Teacher researcher will use questioning techniques to guide teachers during planning. Teacher researcher will observe the teacher participants classroom to provide feedback on instructional strategies discussed during coaching session. The teacher researcher will use the Student-Centered Coaching model by Dianne Sweeney (2011) as a tool for coaching sessions.

Magnet School. Magnet schools have a focused theme and aligned curricula in Science, Technology, Engineering, and Mathematics (STEM), Fine and Performing Arts,

International Baccalaureate, International Studies, MicroSociety, Career and Technical Education (CTE), World Languages (immersion and non-immersion) and many others. (www.magnet.edu, 2013).

New Tech Network. NTN has developed a comprehensive school model, a proprietary learning management platform, tools, resources, training events and implementation plans delivered by an exemplary team of coaches that enable school districts to reinvent schools with their local teachers through a multi-year partnership. After having a successful program in Napa, California, the network has expanded to schools in 28 states and Australia. (www.newtechnetwork.org)

Poverty Index. The South Carolina Education Oversight Committee developed a poverty index that is a composite of the percent of students in each school who are eligible for Medicaid services and/or those who qualify for free and reduced-price meals.

Problem Framing. When students have the opportunity to take ownership of the problem being solved in the project. Students restate, restructure, and redefine the problem associated with the project in their own words. (Svihla & Reeve, 2016).

Project-based Learning. An environment where students start with a driving question to be solved and move into to the inquiry process to solve a problem associated with the project through collaborative activities. During the collaborative process, students are provided with scaffolding tasks to further enhance content knowledge and assist them with the creation of a tangible product associated with the driving question. (Krajcik & Blumenfeld, 2006).

Scaffolding. The support given during the learning process which is tailored to the needs of the student with the intention of helping the student achieve his/her learning goals. (Sawyer, 2006).

Standardized Test Scores. At the high school level in the state of South Carolina, End of Course tests are given in English 1, Biology 1, Algebra 1, and US History. In the third year of high school, students take the ACT and WorkKeys assessment.

Underperforming. A high school will fall into this category if the composite average in the following six criteria together ranks in the bottom 5%: Graduation Rate, Percentage of juniors who are college and career ready; Performance of English Language Learners on WIDA assessment; Percentage of students scoring C or higher on English 1 and Algebra 1 on end-of-course assessment, Percentage of students scoring a C or higher on US History and Biology end-of-course assessment, and school climate rating. (www.ed.sc.gov)

CHAPTER 2

LITERATURE REVIEW

The purpose of this literature review is to describe the literature that frames the present study that is designed to enable the researcher to improve as an Instructional Specialist at Monarch High School (pseudonym) in order to prepare teachers of ninth-grade students to develop curriculum and pedagogy for Project-based Learning (PBL) units of instruction that have authentic learning experiences and assessments for low socioeconomic status (SES), southern students in Monarch High School. The school district located in Greenville, South Carolina supports professional development for PBL implementation.

The scope of this literature review is twofold. It begins with a discussion of the issues associated with teaching PBL in a high poverty school including the characteristics associated with successful schools. While the teaching team is desirous of holding the students to high standards and a rigorous curricular content, they are also mindful of meeting the students where they are in terms of academic achievement and lived world experiences. The team is dedicated to designing curriculum and pedagogy that relates to the lived world experiences of low SES students while at the same time enabling students to graduate from high school and gain access to postsecondary institutions and/or the workforce upon graduation.

The secondary goal of the literature review is to provide a theoretical framework and historical prospective for this action research project. As the teacher-researcher and

participant-researcher, I set out to use the action research methodology and the literature on PBL to articulate the specific need for project-based learning in this particular school and to demonstrate why action research is the best possible methodology for data collection, data analysis, and data reporting. Implementation of project-based learning may or may not be successful, however, the study is aimed at enabling teachers to develop curriculum and pedagogy that will reach this particular student population. Since action research is cyclical and iterative, an action plan will be developed to improve upon this initial research to further enable teachers to design and implement PBL units that are aimed at increasing student success at MHS.

Organization of the Literature Review

This review of literature is organized around five themes that set out to establish how to address the problem of practice associated with the action research. Theme one discusses characteristics associated with children living in similar impoverished situations as the students in this low SES school and the challenges faced by schools and classroom teachers. The second theme addresses the importance of teacher quality and teacher preparation as it relates to student achievement. The final themes of the review of literature provide a theoretical framework for the PBL model, the chosen curriculum model implemented for this low SES school.

Strategies for the Literature Review Search

During the process of creating a well-developed literature review, I first created a fishbone diagram, which served as my tool to develop my argument (Machi & McEvoy, 2016). The diagram established key factors and themes contributing to the problem of practice.

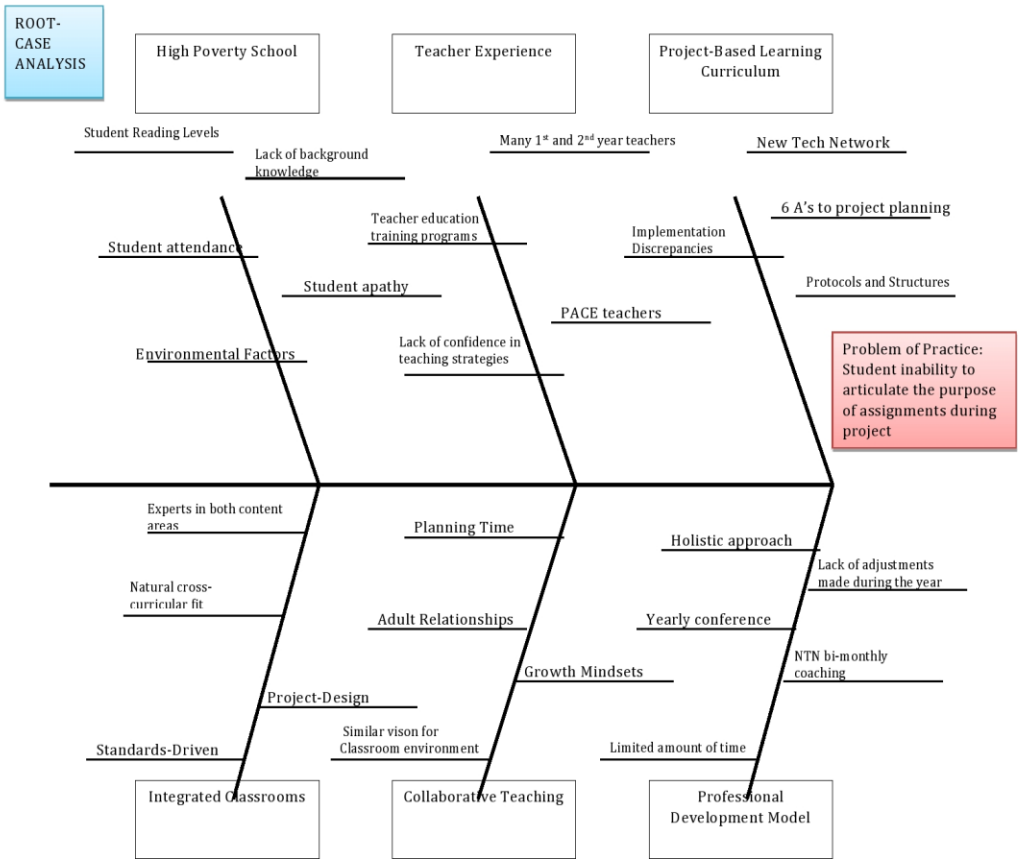

Figure 2.1: Fishbone Diagram

Once those key factors were identified, I conducted a library search to locate journal articles, books, and other resources that enabled me to create this for a PBL team in a low SES school.

Purpose of the Literature Review

Historically the low SES students at MHS have been underachieving on South Carolina state standardized tests. As a result, the school leaders decided to implement a PBL approach to curriculum and pedagogy and to work in teams in order to address the needs of this local and particular population and to meet them where they are. The action research that accompanies this task will be led by the teacher-researcher who is also an administrator at the school and who has created the teacher team in order to create the

PBL working model for this particular school. That working model will be articulated in Chapter 5 of this dissertation in the Action Plan and the literature surrounding and supporting this endeavor is articulated in this Chapter 2.

Historical Perspectives of Education. Since the American Civil War, the United States has recognized the need to educate all citizens regardless of race, class, or gender in what is known as the Common School Movement (Flores, 2017). Obtaining an education is not only a privilege, but is believed to be a way that a person can get ahead in our capitalistic economic system and society (McShane, 2014). As a founding father, Thomas Jefferson believed that education for all white males would enable them to read thus vote and participate in the representative republic. On the contrary, individuals such as Horace Mann, believed that American citizens had a serious duty to train all children, wealthy and poor, and meet their intellectual needs as well as their moral needs (Fife, 2016). One can argue that even though Jefferson and Mann had differing ideals and philosophies of how we should educate our children, both men played a part in shaping American schools. Since the 18th century, formal education has changed and although many individuals have posed the best way to provide instruction to students, in some ways the structure remains the same. Topics such as school choice and the formation of charter schools are at the forefront of today's reform movements and are topics of discussion for erasing the educational disparities that exist in some of America's school. It is the competing philosophies of education that continues to push us as citizens to determine the best way to educate our children and continue to move this country forward.

If education were a construct, several philosophers have tried to operationally define the term. Of the four major philosophies of education, the current educational system has leaned more towards William Bagley's philosophy of essentialism. The essentialist educational philosophy centers itself around students learning basic skills, strict discipline, and subject matter in schools (Null, 2003). Essentialists, such as Bagley, believe that instruction should be teacher-centered and should be provided in a traditional way. Following similar thoughts of Bagley, in 2002, President Bush signed into law the No Child Left Behind Act (NCLB) to hold all states accountable for closing the achievement gap amongst schools through the instruction of core content and basic literacy skills (Arce, Luna, Borjian, & Conrad, 2005). The push for standards-based instruction and testing grew more and more important as states in the United States were encouraged to show growth of all students in the classroom as measured on a standardized test with standardized curriculum and Common Core State Standards. (Klein, 2015).

Under the laws of NCLB, schools were measured by their Adequate Yearly Progress (AYP) and were measured by their growth targets (DeSimone, 2009). In the State of South Carolina, high schools were provided with objective targets which were determined by the number of subgroups tested each year (SREB.org, 2013). The more subgroups a school had, the more targets were assigned. After the lack of success in SC with meeting the necessary requirements, the state applied for a waiver. That waiver allowed the state to create their own standards for schools showing success. Still driven by Bagley's essentialist approach to education, SC has chosen to continue to use

subgroups and test scores as a means of determining school effectiveness (SC ESEA Flexibility Request, 2012).

Characteristics of Students in Poverty. Poverty brings about many challenges in today's schools in that students who enter the building may be distracted by its detrimental effects. Students who grow up in impoverished conditions exude certain characteristics and are more likely to experience academic and behavioral issues due to exposure to stressors from their home life (Hanover Research, 2015). Although there are many instances where people define poverty in monetary terms, Minujin and Delamonica (2005), would argue that poverty is "a phenomenon that cannot be defined only in monetary terms" (p. 11). Being multifaceted in nature, poverty itself can be characterized in multiple ways and must be addressed using multiple strategies.

Ekono, Jiang, and Smith (2016) proclaim children living in deep poverty are more likely to have elevated blood lead levels, suffer from depression and anxiety, and experience developmental delays, all of which can create behavior and learning problems in school. These issues are all associated with the living conditions the families have to encounter. A higher percentage of young children in deep poverty have parents who are "experiencing poor or fair health or mental health, frequent parenting stress, and a lack of perceived social support and security in the family's neighborhood" (Ekono et.al., 2016, p.11). In fact, these students could also come from homes where the parents are not high school graduates and school is not a focus for survival. Moreover, when children in poverty are subjected to so much hardship and go without their basic psychological needs being met, numerous efforts must be made in schools to assist these children.

Impact on Teaching and Learning. Teaching students in a high poverty community brings about certain challenges that do not exist in schools serving the middle and upper class. These challenges have a major impact on how educators must plan for, instruct, and evaluate students. Jensen (2009) states:

> Children raised in poverty rarely choose to behave differently, but they are faced daily with overwhelming challenges that affluent children never have to confront, and their brains have adapted to suboptimal conditions in ways that undermine good school performance. (p. 14)

Often times, students in poverty have lower performance levels due to a lack in background knowledge, lower reading levels, or have poor school attendance rates. Many children living in impoverished neighborhoods are more likely to experience violence, are exposed to drug dealing and drug usage in the home and other forms of crime than their more affluent counterparts (Buckner, Mezzacappa, & Beardslee, 2003). These exposures can potentially cause children to exhibit certain behaviors and attitudes in school that are undesirable. These students may struggle socially in schools and often have "emotional challenges such as anxiety, low self-esteem, anger, embarrassment and depression" (Moore, 2013).

In a high poverty school such as MHS, "Some families and communities, particularly in poverty stricken areas, do not value or understand formal education" (Lacour & Tissington, 2011). This lack of appreciation for an education can affect students who enter school unprepared and unmotivated to accept all of the opportunities schools have to offer. "Among adolescents, family economic pressure may lead to conflict with parents, resulting in lower school grades, reduced emotional health, and

impaired social relationships" (Brooks-Gunn & Duncan, 1997, p. 55). The family dynamic plays a crucial part in the way students view school and it is critical for teachers to have this understanding before students enter their classroom.

To grow up emotionally healthy, young children need a strong primary caregiver who provides unconditional guidance, love and support as well as a safe and consistent living environment (Jensen, 2009). Unfortunately, many of the students in this type of environment constantly switch living arrangements and often do not have their most basic needs met. When a child's basic needs go unmet, production of new brain cells is inhibited altering the path of maturation. Due to the constant stress of not having needs met while growing up, researchers have shown that children who grow up in this type of environment have less gray matter volumes in their brain (Kwon, 2015). This means that when students enter schools at a young age, they are already academically behind their peers.

Pedagogical Approaches. One of the first steps an educator can take in the classroom when teaching children in high poverty situations is to give students a sense of control (Izard, 2016). Many times the students in this situation do not have any control of what goes on in their world, however, walking into a classroom where the student can have choice in what assignments to complete or how they complete their assignments gives the student a sense of control. If a child enters the classroom from having a rough night at home or if they were subject to sleeping in a car the night before, Izard (2016) suggests providing opportunities for students to have control in the classroom "may give time and space to regain composure when emotional control has been temporarily lost" (p. 26). Students benefit from having flexibility of assignments, a variety of types of

assignments, and choice in how they complete assignments in a fair and equitable manner (Devlin, Kift, Nelson, Smith, & McKay, 2012). Offering students a choice in the classroom helps them to take control of their own learning in the classroom.

There are several strategies suggested by Jensen (2013) that will engage students in poverty in the classroom. A rule that is suggested is for teachers to get "buy-in" from students by piquing the students' curiosity. Jensen (2013) states that the best strategy to get students locked into learning is "to create a hook that pulls students enough to at least try the next step" (p. 27). This simple step provides relevance and a since of challenge for students to get motivated about. Teachers should create student-centered learning environments in the classroom where students receive personalized instruction. These types of learning environments allow students to feel that the teacher is in tune with their needs and students to be more engaged and connected to the purpose of the instruction (Hanover Research, 2015).

Gorski (2013) recommends teachers should "Express high expectations through higher-order, engaging pedagogies" (p. 50). Students who are living in poverty tend to do better when they participate in rigorous, learner-centered curriculum that is relevant to the students' lives.

Oftentimes, as I have witnessed in our school through classroom observations, teachers lower their expectations of students because of their own bias about poverty students' ability to learn. Yet, like their more affluent peers, "low-income youth learn best at schools in which pedagogy is driven by high academic expectations for all students – where standards are [not] lowered based on socioeconomic status" (Hanover Research, 2015, p. 19). Student-centered learning techniques such as personalized

instruction, authentic instruction, mastery-based assessment practices, learning that reaches beyond the school walls, and learning models that change the school schedule is what the Hanover Research group suggest for instructional techniques for students in poverty. "Engaging parents and the community to serve as partners with the school" is another way, suggested by Parrett and Budge (2012), that schools can counteract the effects of poverty on children (p. 22). Bringing in parents and members of the community allows for the creation of partnerships and helps all stakeholders to understand the vision and mission of the school. These strategies allow students to feel more connected to school and feel a sense of purpose in their education.

High Achieving/High Poverty Schools. Although children growing up in poverty can be faced with less than adequate circumstances, schools should strive to be a place where students living in poverty can find success. For instance, according to Chenoweth & Theokas (2013), schools dealing with students in poverty are successful when there is a belief that all students have great potential. These successful schools work to create a collaborative work environment amongst adults that is focused on high academic expectations and evaluation of student work. When educators have a better understanding of these challenges students face, there are other actions that can be taken to help their disadvantaged students succeed in school. In a study conducted in 2005 by the Kentucky Department of Education, schools that have a poverty population of over 50% but have a state academic index of 75 or higher and an achievement gap of 15 points or lower between low and middle income students, exhibit certain characteristics. One of the characteristics observed were having high expectations that were concrete and the belief that all students can be successful. Additionally, these schools had a strong focus

on academics, instruction and student learning (Kannapel & Clements, 2005). There was also a strong focus on individual student assessment that was systematic and regularly done in order to determine student needs. Having high expectations and an academic focus in place that supports student learning, not only provides students with the structure they need to feel safe but it also provides them with the enrichment activities they need to increase brain function and build core academic skills (Jensen, 2009).

In the 1990's a new concept of high achievement in high poverty schools began. These high achieving schools were identified as 90-90-90 schools having 90% of their population living in poverty, 90% of their population being minority students yet 90% of their students meet or exceed the state academic requirements. Douglas Reeves (2003) shares in his review that these schools share common characteristics as well. He states that there is a "high focus on academic achievement, clear curriculum choices, frequent assessment of student progress with multiple opportunities for improvement, an emphasis on nonfiction writing, and collaborative scoring of student work" (p. 3). Schools in this category found it relevant to put an emphasis on reading, writing and mathematics in order to build the students' cognitive skills students were lacking. One way to address the issue of poverty is through the education of those who suffer from it. These strategies support Jensen's (2013) claim that there are actionable strategies that can be used in schools to give children in poverty the chance to be successful.

Teacher Quality and Experience

High poverty schools often deal with the challenges of hiring and retaining good teachers for the classroom. Almy & Tooley (2012) state "All students pay a high price when they are subjected to ineffective teaching, but the highest price is paid by those who

can least afford it: the students who start out behind" (p. 2). In the past, MHS was a teacher dumping ground where ineffective teachers were sent when they were not performing well in other schools. Over the past 5 years, the principal has worked tirelessly to remove ineffective teachers but the school has still struggled to retain quality teachers for various reasons. In this section the impact of teacher turnover and teacher experience on schools will be explored. Additionally, the necessity of retaining teachers in high poverty schools will be examined.

Teacher Turnover. When implementing any instructional program or new curriculum model, the teacher is the inevitable centerpiece to its fidelity. In schools that serve low-income students, the turnover rate of teachers can be an extreme problem. Ronfeldt, Loeb, and Wyckoff (2012) state, "Since staff turnover presents significant challenges to the successful and coherent implementation of such instructional programs, it also may harm student achievement" (p.8). The inability of schools to staff schools with quality teachers has been a long standing problem within our education system (Ingersoll, 2001). Each year MHS has experienced a loss of 7 to 10 teachers, making it difficult to sustain a solid project-based learning implementation plan. Experiencing teacher loss at this rate makes it difficult to sustain fidelity of implementation.

There are a number of factors that may push teachers away from schools including: the type of students being served by the school, the professional work environment, a lack of quality professional development, and restrictions that hinder teacher autonomy in the classroom (Rice, 2013). Additionally, some teachers also move away from working with students who are low-achieving. There have been many former teachers at MHS that explicitly left because the work was "too hard" and they were

experiencing burnout. Teacher weariness is currently an ongoing problem and as shared by Resta, Huling, and Yeargain (2013), beginning teachers often rethink their decisions of becoming a teacher when experiencing low points during their first and second year. When teachers begin to experience these types of feelings, it is necessary to increase the amount of support provided to them and find creative ways to balance their emotions.

Teacher Experience. Having to hire 7 to 10 new teachers a year at MHS is a challenge when trying to find individuals who will be invested in at-risk students. Oftentimes teachers with many years of experience prefer to work in schools with less challenges and we are left to hire individuals who are recent college graduates. It is more likely newly graduated, inexperienced teachers work in schools that are high in poverty (Rice, 2010). Although this seems to be a trend in schools like MHS, and can additionally be seen as a negative, the research of Rice (2010) states teachers are most productive and creative, actually showing their highest performance levels during the first few years of teaching. As an administrative team, we try to capitalize on their productivity, however, first year teachers are still in need of a great deal of support.

Some of the most innovative teachers in MHS have less than 5 years teaching experience. As a result, implementing new strategies and being out-of-the-box with their teaching methods is not a stretch for them. However, due to the stressors that teaching can bring, most inexperienced teachers suffer from dwindling enthusiasm and creativity within the first few years of the job (Callahan, 2016). Hanover Research (2016) confirms this in its report by stating that novice teachers spend a lot of time in survival mode as they work towards building a classroom management plan that works while at the same time learning curriculum and instructional strategies. The learning curve for these

teachers is enormous and although these teachers are trying new things, they have a huge need for instructional support.

Many high poverty schools have a large amount of first year teachers but there is a subset of teachers who are acquiring their certificate through alternative pathways. Due to staffing problems, alternative routes and programs have become a very important way to supply schools, especially those that are hard to staff (Boyd, Goldhaber, Lankford & Wyckoff, 2007). There have been several instances where V.I.F teachers (Visiting International Faculty) from other countries and PACE teachers (Program for Alternative Certification for Educators) are hired for MHS classrooms. Many alternative certification programs mirror that of traditional education programs, but there are some cases where those programs are not very selective in the candidates they choose (Walsh & Jacobs, 2007). Additionally, these alternative routes fail to determine if the teacher candidate can relate to students or if they have the ability to transfer their content knowledge to others. When teachers have a difficult time building relationships with students or the culture that exists in the United States is different from their own, a different layer of support is needed.

Retaining Teachers. There are teachers who enjoy and thrive in high poverty schools and even though they know the work is not easy, they persevere and stay. Almy and Tooley (2012) share teachers are satisfied more by the culture of the school than by the demographic make-up of the students attending. Teachers who worked in positive school environments seemed to stay in high poverty schools longer and received better results on student achievement measures (Almy & Tooley, 2012). For this reason, there

is a need in MHS to ensure that the culture in which our leadership team strives to create is positive and fosters a collegial working environment for teachers.

"To assist teachers in feeling good about their work, schools must not place beginning teachers into the most difficult classrooms with inadequate support, and all teachers must be provided with frequent quality feedback from knowledgeable practitioners" (Bland, Church & Luo, 2014, p. 3). Many teachers leave the profession due to the low wages received, however, research has shown that individuals are not bothered by teacher salaries if the school working conditions are better (Buckley, Schneider, & Shang, 2004). Darling-Hammond (2007) states, "Teachers' feelings about administrative support, resources for teaching, and teacher input into decision making are strongly related to their plans to stay in teaching and to their reasons for leaving" (p. 3). When hiring teachers for high poverty schools, it is necessary to ensure that individuals hold certain beliefs about students. Teachers who view poverty as an environmental issue rather than a personal issue, tend to persist in high poverty schools (McKinney, Berry, Dickerson, & Campbell-Whatley, 2007). It is important to ask those tough interview questions to ensure the adult that is being placed in front of the students believes in the students' ability to be successful. As MHS strives to build a working atmosphere that teachers enjoy, support, teacher input, and teacher belief systems need to be at the forefront.

High poverty, high performing schools focus on several areas when it comes to the structure of the school environment. These schools have high expectations for student academic performance, they work to build healthy relationships amongst staff and students, and faculty morale (Kannapel & Clements, 2005). As teachers and staff

members work in these high achieving schools to create a culture of excellence in student performance, they regularly analyze student data to verify that the students were getting what they needed in the classroom. Teachers in this environment meet on a consistent basis to plan interventions for students and appropriate instruction. In order to implement this type of work environment, time has to be set aside for teachers to do this. The teachers also need a support system from the administrative team that will work collaboratively with them as they analyze student data and plan instruction. Building a collaborative work environment where reflection, data-driven decision making, and a focus on professional growth ensures that teachers in this type of school setting thrive (Almy & Tooley, 2012). This type of support will hopefully be a catalyst at MHS to create the type of working environment teachers will enjoy.

Project-Based Learning

PBL is a well-studied curricular model that has been documented as a valuable educational model for students. Despite its value and benefits, it is not an easy instructional model to implement as it presents many challenges for both teachers and students (Kramer, 2014). This section will operationally define the project-based learning instructional model as well as provide structures for implementation. The challenges and successes associated with project-based learning implementation will be explored as well.

Conceptual Framework. Project-based learning is an instructional model centered on the learner and instead of the teacher using strict lesson plans that require the student to use a specific path to reach learning outcomes, project-based learning requires the student to investigate a topic that is real and relevant (Grant, 2002). Project-based

learning is an educational approach grounded in constructivist theory where curriculum is organized around well-crafted ill-structured problems (Ram, Ram, & Sprague, 2005). PBL involves "negotiating with learners, focusing on a starting point that each student brings to the PBL process, and allowing greater control by the student in terms of the direction and content of learning" (Kemp, 2011, p. 48).

Historically speaking, early advocates of students learning by doing began with Confucius, Aristotle and Socrates, where their techniques of questioning, inquiry and critical thinking remain relevant in the PBL classroom of today (Boss, 2011). Since the early 1900's, educators such as John Dewey have stressed the benefits of student-centered, hands-on learning. Dewey (1938) argued against the traditional view of students being passive receivers of information in schools and rallied for more experiential learning experiences. The constructivist approach rallies that real learning is only constructed from a learners' background knowledge and experiences (Ultanir, 2012). The idea of constructivism may not be viewed as a theory about teaching, but more of a theory of how individuals learn and obtain knowledge (Brooks & Brooks, 1993).

Other educators such as Maria Montessori and Jean Piaget played a part in the development of project-based learning. Montessori believed that students should do more than just listen in the classroom, but experience their environment around them. Montessori's philosophy is centered on students as self-directed learners who engage in pedagogy that encourages creative problem solving skills (Montessori, 1997). Additionally, she believed that schools should be a place where students learned to be adaptable citizens (Boss, 2011). Piaget assisted educators with shedding light on how

individuals make meaning of their experiences at different age levels. Piaget's insights started the basis for the constructivist approach to education, where students were encouraged to build on their background knowledge by asking questions, researching, collaborating and reflecting on their experiences (Boss, 2011). Piaget (1973) believed humans should not be given information where they are immediately expected to use and comprehend, but humans need to construct their own knowledge.

The roots of project-based learning are grounded in these theorists' beliefs that students should learn from real life experiences. The idea of project-based learning was truly defined by William Kilpatrick. Kilpatrick was a proponent of giving students choice in choosing projects that engender purposeful activity, which are projects that begin with a real purpose and are not teacher developed (Wolk, 1994). He agreed with John Dewey in that school should not only prepare a student for life, but school should be a place where school is a representation of life. Kilpatrick believed that projects should originate from a child's own interests which is how he felt purpose was obtained in a project (Wolk, 1994).

Knowing the research provided by high achieving, high poverty schools, Monarch High School was looking for a way to create a culture where students receive rigorous instructional experiences while simultaneously creating a student-centered learning environment. After much investigation, the school chose to transition from using traditional teaching methods to project-based learning. Duke (2016) suggests several reasons schools should employ project-based learning. First, the skills students use during project-based learning are considered to be those "21st century skills" that American schools are being called to teach. Secondly, research shows that project-based

learning enhances students' knowledge and critical thinking skills. Additionally, project-based learning approaches are more engaging to students than traditional teaching approaches. Lastly, project-based approaches are appropriate for covering state standards (Duke, 2016). In a recent research report (NAESP.org, 2017), project-based learning was seen to have a positive impact on 48 second grade classrooms containing students living in high poverty. Students in the study scored higher in social studies and literacy on the Michigan state assessments after using the PBL model than their peers in the control group. Based on the use of the aforementioned study and strategies high poverty, high achieving schools used, creating a project-based learning curriculum model, will hopefully improve student achievement, as well as, create an environment where MHS students see the purpose and value of school.

Structures for Implementation. Project-based learning is an instructional model that requires students to solve problems related to the real world (Hung, Jonassen, & Liu, 2008). There are four major characteristics involved in the project-based learning curriculum model: 1) self-responsibility for thinking and learning; 2) awareness of social responsibility; 3) thinking and acting from a scientific perspective, but in a practical application; 4) relating both group process and product with professional practice (Kubiatko & Vaculova, 2011, p. 67). Within these characteristics there are several features that make this type of project work unique. A project must have problem orientation, where the problem posed or the driving question asked of the students drives the learning throughout the project (Hung, et al., 2008). Forcing the students to work towards solving the problem whether alone or in student teams, project-based learning requires students to create an end product or concrete artifact that demonstrates how the

students solved the problem or answer the driving question (Kubiatko & Vaculova, 2011, p. 67). "Authentic and purposeful investigations are also hallmark of disciplined inquiry" (Grant, 2002, p. 2). While students are working to find a solution to the problem, they are engaged in meaningful research that allows them to learn by doing instead of participating in a traditional lecture or notetaking session.

Although there are many ways to execute this type of instruction, there are common themes across all of the various implementations. Grant (2002) suggests those common themes as follows:

(a) An introduction to "set the stage" or anchor the activity;

(b) A task, guiding question or driving question;

(c) A process or investigation that results in the creation of one or more sharable artifacts;

(d) Resources, such as subject-matter experts, textbooks and hypertext links;

(e) Scaffolding, such as teacher conferences to help learners assess their progress, computer-based questioning and project templates;

(f) Collaborations, including teams, peer reviews and external content specialists;

(g) Opportunities for reflection and transfer, such as classroom debriefing sessions, journal entries and extension activities (p. 3).

At the end of the learning taken place in the project, the students summarize and present their learning to a real audience (Hung, et al, 2008). These seven listed themes provide a framework for teachers to create a project-based learning curriculum in the classroom.

Challenges with Implementation. Although the model for implementing project-based learning contains several clearly explained steps and features, given the

lack of experience most teachers have with this type of teaching method, will bring challenges for teachers to carry out these steps in the classroom. Ahmadi & Lukman (2015) state "inadequate teaching and non-teaching staff is a bane to successful implementation of curriculum in education sector" (p. 34). Having teachers who are inexperienced or lack the ability to provide quality instruction to students, is a huge barrier when it comes to implementing a new curriculum model. Teachers are a major factor in student learning and their quality and devotion depend on the success to having a high quality learning environment.

Because project-based learning is not easy to implement, it is important for the teachers to buy-in to the new curriculum model. Ertmer and Simons (2006) propose five factors that influence teachers' adoption and use of project-based learning:

> 1) Recognition and acceptance of new roles and responsibilities;
>
> 2) Comfort in the new (physical) environment;
>
> 3) Tolerance for ambiguity and flexibility in managing the new learning environment;
>
> 4) Confidence in integrating appropriate tools and resources, including technology;
>
> 5) Integration of new pedagogies with realities beyond the classroom, including the ability to balance the unique needs of individual learners, teaching colleagues, and administrator (p. 42).

There have been several veteran teachers in MHS who are more comfortable with traditional teaching methods and they have found it difficult to implement a true project-based learning classroom environment. When teachers do not feel comfortable with

these factors, problems evolve and the students do not receive the full experience of what project-based learning has to offer.

Having creative facilitators/teachers on staff makes the implementation of project-based learning easier. "The ability to solve problems and to improve the content knowledge and skills is a challenge, especially to deal with students with low ability, lack of motivation and lack of focus" and in a high poverty school, these student challenges play a big part into how successful the implementation will be (Sumarni, 2015, p. 482). When teachers lack creativity or the ability to move beyond the ability level of students, it is difficult for them to create projects or plan for inquiry within the project. Teachers also need to assume that students come to them cognitively ready to solve ill-structured problems and have the ability to work in collaborative groups (Hung, et al., 2008). Teachers have to exhibit the skills to know how to scaffold students into the critical thinking, problem solving, and self-directed learning.

One of the major frustrations associated with planning for authentic projects is the amount of time it takes to prepare. That preparation involves teachers working in groups to collaborate and create project designs and scaffolding plans. Vrakking (1995) proclaims that new initiative implementation fails due to many reasons, but one of the most common indicators is a lack of support and training for the individuals who have to implement the initiative. When changing the mindset of teachers on how they provide instruction to students, a learning process has to occur. When teachers lack background in PBL, they are less focused on the innovative practices involved with implementation (Toolin, 2004). The change and knowledge acquisition process has to be facilitated and

nurtured well by individuals who understand the amount of effort and work required for success.

Successful Implementation. "Acknowledging that the transition to Project Based Learning is a difficult and time consuming process for teachers, it is important to evaluate school wide systems and professional development in order to best prepare and equip teachers for success" (Kramer, 2014, p. 4). Teachers need time to have collegial conversations with their peers in order to think deeply about project design. Professional development and administrative support are other resources teachers need in order to successfully implement PBL. In the city of Philadelphia, several out-of-school programs utilize the project-based learning model. A structure for PBL implementation was developed where teachers were "provided timeframes for project completion and where teachers were required to utilize several forms for planning, tracking and evaluating projects and student performance" (Schwalm & Smuck Tylek, 2012, p. 4). This system allowed for consistency amongst teacher teams as well as provided support for teacher planning.

More than anything, successful PBL implementation requires teacher support and training from colleagues. "Teachers construct their knowledge through social interaction with peers, through applying ideas in practice, and through reflection and modification of ideas" (Ertmer and Simons, 2005, p. 4). Teachers need to have opportunities to learn and grow from their peers as they change the way they teach. Additionally, teachers need support throughout their learning process during implementation and not just once or twice a year.

When understanding project-based learning, it is often referred to as interdisciplinary in nature due to projects addressing real-world problems and scenarios. Duke (2016) proclaims that PBL is a great way to teach informational texts to students because of the large amount of researching, reading, and writing required by students on a daily basis. When students are put in a successful PBL classroom environment, the author notes that when students read and write for specific purposes or audiences, student skills become stronger in these areas. Both written and oral communication are embedded within the traditional English language arts (ELA) curriculum, but in a PBL classroom, students also learn to collaborate, use critical thinking and creativity. In an economics class, students who participated in a project-based curriculum outperformed students receiving traditional instruction on the standardized test of economic literacy, especially in the areas where students have to apply their knowledge and think critically to solve real-world problems (Miller, 2014). In a study conducted by Duke and Halvorsen (2017), students in a second grade class in a low performing, high poverty school participated in project-based learning activities and those students scored 23% higher in informational reading than their peers in the control group. PBL infuses multiple skills that students will need to be successful in all types of classrooms.

New Tech Network

The New Tech Network is a community of schools that prides itself on being a "design partner for school change" so that districts and schools can transform themselves into innovative learning communities (newtechnetwork.org). The network is set up to provide districts and schools with a platform for project-based learning implementation. Through intense coaching, online student management systems, virtual and on-site

workshops, the network provides support for schools at all levels of implementation. This section will explore the history and purpose of the network, as well as the structures put in place by the network for schools to effectively implement its PBL model.

Conceptual Framework. When choosing to implement project-based learning as a curriculum model, it is necessary to determine which structure of implementation will be put in place. MHS chose to join the New Tech Network and use its protocols and procedures for implementation. The New Tech Network began its vision in the mid 1990's, when a group of entrepreneurs in Napa, California noticed that students graduating from their region's high school were not prepared to enter the workplace. These individuals partnered with Napa Valley Unified School District and opened New Technology High School, as a public district school, in 1996. When the school opened, there was a focus on preparing students academically by giving them access to 1-to-1 technology as well as providing students with opportunities to collaborate and communicate their ideas in groups (newtechnetwork.org).

The New Tech Network has four design pillars in which its structure is grounded in. Those design pillars help schools to design their project-based learning model; they are as follows: 1) having outcomes that clearly define success; 2) providing teaching that matters; 3) creating a school culture that empowers both students and adults; 4) using technology that enables students to research and access information (New Tech Network, 2016). Currently there are over 180 total schools serving all grade levels in the network and in New Tech schools, students are afforded the critical thinking skills and communication skills necessary for postsecondary success (New Tech Network, 2016).

"Although many New Tech high schools have only been in operation for one or two years, statistics relating to student attendance have shown improvements over traditional public schools" (Hanover Research, 2013). New Tech high schools have also shown declines in dropout rates and increased graduation rates. Some New Tech high schools have also seen improvement in state End of Course test scores (Hanover Research, 2013).

The philosophy of the New Tech Network matches the mission that MHS is trying to fulfill. As a school MHS is trying to provide learning experiences for our students that are equitable and rigorous. When working with students in poverty, Jensen (2013) proclaims there are several factors that correlate to student engagement and they are also connected to socioeconomic status. Students in poverty want to "feel connected to their teachers and to what they are learning" and the New Tech Network provides a structure where students are receiving instruction by solving real world and relevant problems. "A students' attitude about learning is a moderately robust predictive factor of academic achievement" (Jensen, 2013, p. 13). The New Tech Network trains teachers to help students with developing a growth mindset in order to assist them with changing their attitude towards school.

Structures for Implementation. New Tech schools are those in which the school population is small (less than 400 students), however, Monarch High School has between 700 and 800 students during any given school year (Hanover Research, 2013). New Tech prides itself on creating small learning communities where there is a huge focus on a student-centered culture. Because MHS is larger than the recommended size for the network, structures have been put in place to ensure students are receiving the

same type of PBL environment as the other schools in the network. This requires additional support of both teachers and students.

Each New Tech high school can identify unique learning outcomes, however, the school-wide outcomes the New Tech Network provides are a comprehensive focus for all schools. Their learning outcomes include:

1. Technology and Information Literacy
2. Critical Thinking and Logical Reasoning
3. Written Communication
4. Work Ethic and Professionalism
5. Oral Proficiency
6. Collaboration
7. Curricular Literacy (Hanover Research, 2013, p. 9)

Ensuring that the student learning outcomes are being met is crucial and teachers need support with scaffolding the content in order to make sure that students can understand content through the lens of each area. "Facilitating project-based learning requires the kind of leadership skills that allow teachers to help a group of learners to move in the direction that they want to go, pointing out potential pitfalls or making suggestions without student judgement" (Kubiatko & Vaculova, 2011, p. 69). Leading teachers to become facilitators of learning has been a challenge and providing support has to be a priority.

In order for teachers to be able to realize the potential for their students, "teachers must have consistent and regular opportunities to learn themselves" (New Tech Network, 2016). New Tech Network provides national and regional conferences as well as virtual

professional development opportunities for teachers. Educators are allowed to connect with other educators in the network and learn new and innovative ways to implement projects. The New Tech Network has a student learning management system called Echo where teachers can find project resources, project planning templates, and project ideas to support their learning as well, however, we have found that the annual conferences and virtual professional development do not fully meet the needs of all of our teachers. With a constant turnover of trained PBL teachers every year, the network is just not enough to keep everyone on the same page.

Professional Development

Due to the complex nature of project-based learning, there is a need for teacher growth and development to support classroom implementation. Educators in a PBL environment are considered to be lead learners as they work to demonstrate learning to students through their own authentic discovery (Walton, 2014). Support is necessary for educators in order for them to truly lead this learning process. This section will discuss the characteristics of effective professional development, how professional development impacts teacher experiences and PBL implementation, and the types of support educators want from their school environments.

Effective Professional Development. The key to improving teacher quality in schools is for school communities to implement effective professional development plans. Planning a wide variety of activities that allow teachers to increase their pedagogical knowledge and enhance teaching practice leads to powerful mechanisms that contribute to teacher personal and professional growth (Desimone, 2011). Teacher professional development has been historically seen as whole group workshops and

college courses, however, this approach alone has been seen as ineffective (Kang, Cha, Ha, 2013). In order for professional development to be effective, especially in a PBL school environment, a different method has to be employed.

Dunne (2002) asserts that professional development cannot be done in a "one-size-fits-all" method and that there is a need for activities to be focused on the real work of teachers. When teachers can see the value of how the professional learning directly relates to what they are doing in the classroom, the learning becomes more relevant and applicable to the educator. Learning opportunities that take place over long periods of time allows for teachers to implement and reflect on the learning that took place between professional development sessions (Lipowsky & Rzejak, 2015). Allowing teachers to learn new knowledge and then apply that knowledge right away provides additional relevance to the teacher's learning process.

When distinguishing characteristics of professional development that lead to teacher learning that is effective, it is important to think about activities that will lead to teacher engagement. Desimone (2011) suggests that effective professional development should allow teachers to participate in active learning opportunities where teachers observe other teachers, receive feedback, or give presentations rather than sitting through workshops and lectures. During professional development sessions, teachers should learn content-related strategies and creates a space for teachers to share ideas, collaborate with colleagues, and provides coaching that focuses on teacher individual needs (Darling-Hammond, Hyler, & Gardner, 2017). Giving teachers time to engage with their peers and learn from experts is especially important to create a professional learning community where all teachers, regardless of their experience, the chance to grow.

Professional Development for PBL Implementation. Implementing project-based learning can present challenges because it requires teachers to switch from traditional teacher-centered instruction to a learner-centered classroom environment (Walton, 2014). Because teachers, no matter years of experience, struggle with this new classroom role, it is imperative to provide support that will assist them in changing their mindset about teaching and learning. When it comes to PBL implementation, An (2013) found that teachers needed opportunities to have "synchronous, interactive questioning sessions" (p. 73), where teachers have the opportunity to work through scaffolding plans with an expert on the PBL process within the classroom. Additionally, in order to develop teachers in a PBL school, teachers need professional development that is innovative and different. Job-embedded, blended, and personalized learning for teachers assist them with their growth and development and having a supportive instructor or mentor that embraces the fact that "learning to facilitate in a PBL environment is an ongoing journey" is a necessity for providing professional development for teachers (Liebtag & Vander Ark, 2016, p. 4).

Teachers cannot be expected to change the way they think about instruction and learn and grow in the way PBL implementation requires in whole group professional development session alone (Kramer, 2014). Providing support structures where teachers engage in professional learning communities and PBL coaches meet with teachers on a regular basis give teachers time to participate in collaborative conversations and reflection is helpful when teachers are working to implement projects in the classroom (Bradley-Levine, Berghoff, Seybold, Sever, Blackwell, & Smiley, 2010). The way in which teachers are supported in the PBL environment needs to mimic the way in which

teachers need to support their students in the classroom. Focusing on teachers as individuals as well as members of their collaborative team while simultaneously providing them structured and open-ended learning time, gives teachers a better understanding of how students should learn during the PBL process (Fallik, Eylon, Rosenfeld, 2008). PBL demands a different type of professional development that models the way teachers need to implement, where teachers are allowed to construct meaning, try new strategies, and reflect on the effectiveness (Kramer, 2014). Creating a collaborative environment where teacher learning mirrors that of student learning not only enhances teacher understanding of PBL but will hopefully offset the challenges teachers face with implementation.

Teacher Preferences. In order for teachers to create experiences for students that promote the critical thinking and problem solving skills required by PBL, educators must work to offer sophisticated and more effective learning experiences for teachers (Darling-Hammond & Richardson, 2009). "Teachers want professional development that is interactive, engaging, and relevant for their students" (Matherson & Windle, 2017, p. 30). Oftentimes, professional development is designed for a whole group and teachers do not see an application to what they are doing in their own classroom. Teachers find that professional development is more powerful when it is linked to the lessons they are currently employing in their classrooms (Desimone & Garet, 2015). Offering professional development that is teacher-driven and allows teacher input gives teachers control of their own learning (Matherson & Windle, 2017). When teachers feel that they have a say in what they learn, they learn how to employ those same strategies into their own classrooms.

When implementing new initiatives or curriculum models, teachers can be confronted with multiple messages and sometimes conflicting views of what they are to do with the initiative in the classroom (Kennedy, 2016). For this reason, high quality professional development is necessary for teachers. Deepening the entire school community's knowledge of how to plan, instruct, and assess in a PBL environment, gives administrators and teachers a common perspective. Teachers inherently want to make a consistent link between the theory behind the initiative and their classroom practice (Steeg & Lambsom, 2015). Having high quality professional development designed to give teachers what they need and want, ensures this type of consistency.

Summary

In Chapter Two, a review of the related research was shown to provide a conceptual framework and theoretical foundation for the action research study. The challenges high poverty schools face is real and the large disparities in achievement and academic performance warrants school leaders to change the way they are educating these students (Jacob & Ludwig, 2009). The isolation of urban communities, high concentrated poverty, and family instability all contribute to the conditions and risks of failure in high poverty schools and these issues are heightened when teachers are inadequately prepared for this type of environment (McKinney, Flenner, Frazier, & Abrams, 2006). These challenges and concerns call for schools to provide rigorous, socially equitable educational experiences in order to give students living in poverty a chance at being college and career ready.

Project-based learning, a well-researched innovation that provides students with rich educational experiences, allows students in these type of settings to engage in active

investigation and problem solving, which benefit their learning process (Birney, Watson-Currie, Jha, 2017). This constructivist approach to education provides leaner-centered opportunities where students enhance their knowledge construction, communication skills, problem solving skills, as well as their ability to be self-directed learners (Ultanir, 2012). High poverty schools often deal with high teacher turnover and are highly populated by inexperienced teachers and due to the complexity of the implementation process of project-based learning, teacher preparation and development is key. Schools dealing with these challenges are high performing when there is a clear curricular focus and a focus on teachers working in a collaborative environment (Reeves, 2003). Project-based learning allows for this type of learning structure and lends itself to teachers working together to create relevant learning experiences for students.

Due to the necessity of teacher preparation and development with the project-based learning model, professional learning opportunities have to be provided using a variety of methods to tend to the individual needs of teachers. Providing these opportunities allows for inexperienced teachers to increase their understanding and efficacy in creating real world, ill-structured problems for students to engage in during implementation (Birney, et al., 2017). Teachers want to participate in ongoing learning experiences that not only enhances their content knowledge, but additionally requires them to be active learners and collaborators (Kang, et al., 2013). Being involved in a network of learners such as the New Tech Network, allows teachers from all of the world to work together to implement a PBL model that creates school environments that is cutting-edge and innovative, all of which high poverty schools need in order to prepare students for the real world.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Chapter Three of this dissertation in practice is designed to present the methods used in this action research study. After four years of project-based learning (PBL) implementation, teachers at Monarch High School still have difficulty planning and implementing projects that address student needs in the classroom. Also providing relevant and purposeful tasks and experiences for students during project implementation seems to be an observable challenge. As the Instructional Specialist of the school, I am solely responsible for the training and development of teachers in the building. Additionally, it is a part of my role to plan with teachers and support them while they are implementing PBL and also help to make the process less difficult. The methods used in this action research study stem from Sweeney & Harris' (2017) student-centered coaching model, where the teacher-participants provided their perception of the student-centered coaching model's effectiveness on their implementation of PBL.

Problem of Practice

There is a need for me to improve my practice as an Instructional Specialist at Monarch High School in order to prepare teachers of ninth-grade students to develop curriculum and pedagogy for project-based learning units of instruction that have authentic learning experiences and assessments for southern low socioeconomic status (SES) students. There is also a need for me and the teachers to work together to ensure

the students can see the connection between the project and how it prepares them for life after high school.

Description of the Researcher

I am an Instructional Specialist at MHS in my thirteenth year in the school and it is my job to ensure that all teachers, new and veteran, in the building understand the structures and protocols associated with project-based learning in all courses. With these understandings, I am particularly interested in improving my teaching techniques with teachers and ascertaining the best way to ensure that teachers are implementing projects with fidelity. The action research process lends itself to me making the improvements I am looking for in my approach. I will be able to plan with, teach with, and analyze data with the teachers through the implementation of the coaching model. However, I will also observe the teacher-participants in order to create field notes and plans for coaching sessions.

Through the action research process, there are several benefits mentioned by Mertler (2014) that the teacher-researcher can aspire to gain. He mentions that action research is "often used to develop theories that eventually help determine best practices in education" (p. 22). Having the ability to conduct research in a real high school setting, with real teachers doing real things, is an advantage because we can determine together what is practical and relevant to their needs. Improvement in educational practice is another benefit stated by Mertler (2014) due to the fact that I can be reflective in my own practice and gather information on how my teaching methods are working. This process allows me to collaborate with teachers and work with them to determine their specific needs. This partnership makes professional development personal and I can inherently

design my instruction to meet the needs of the teachers at that time. These benefits will be passed on the students through good classroom instruction and will lead to whole school improvement. Mertler (2014) also suggests that action research can eventually lead to teacher empowerment, intellectual engagement, and professional growth, all of which I plan to achieve through this process.

Description of Participants

Four classroom teachers are involved in the action research study, all of which teach a 9th grade integrated English 1 and Integrated Business Applications class called Digital Literacy. One co-teaching team of teachers consists of a White male, Joseph (pseudonym) and a White female, Elizabeth (pseudonym), both of which are beginning their second year of teaching. The second co-teaching team consists of one White female, Amy (pseudonym) in her 15th year of teaching and one White male, Harry (pseudonym) in his 2nd year of teaching. Additionally, both males are obtaining their teaching certificates through the Program of Alternative Certification for Educators (PACE), an alternative teacher education program through the state of South Carolina. This program allows for degreed individuals to obtain a teaching position in their field of expertise (South Carolina Department of Education, 2018). All four individuals are beginning their 2nd year of project-based learning implementation and have one year of experience with implementing pbl in the school. All teacher-participants are coaches of fall athletic teams and have very little time after school to plan projects for their students.

Description of Research Site

Monarch High School (MHS), located in the upstate region of SC, currently serves 760 students where the current poverty index of over 92% and therefore all

students are participating in the free and reduced lunch program (South Carolina Department of Education, 2016). There are 50 classroom teachers, 3 classroom aids, and 6 Administrators at the school. After being categorized by the state of South Carolina as *At-Risk* for seven consecutive years, in 2011, the school moved to being categorized as *Below-Average* and in 2014, the school increased to the *Average* ranking (South Carolina Department of Education, 2016). In the 2015 school year, *Underperforming* is how the school was labeled due to an End-of-Course pass-rate of below 40% and low performance on both the ACT and WorkKeys assessment (South Carolina Department of Education, 2016).

Although the data provides a superficial definition of the research site, as you enter the building you will find a safe and warm atmosphere where graduation robes hang on the walls as a means to motivate students to finish high school. A trophy cabinet aligns the front hallway as well as exemplary student work samples. Each hallway contains combinations of paintings of the school's mascot and motivational posters so every student understands the mission of MHS. There are colorful collaboration spaces for students to work in groups and each classroom provides small workspaces for students to receive assistance from the teacher/facilitator. The grounds and facility are well-maintained by the custodial staff and providing excellent customer service to visitors is the front office staff's primary goal. Each student in the building, along with classroom teachers and school counselors, receive a laptop. Additionally, all classrooms are equipped with smartboards and additional desktops for students to research and develop final products.

Purpose of the Study

At MHS, there are several teachers that have difficulty planning and implementing projects that not only address some of our students' academic deficiencies but provide the students with relevant, purposeful experiences. In a well ran PBL classroom, students understand how their work inside of the classroom can stretch beyond the classroom (New Tech Network, 2016). This type of classroom has students being asked a question such as "Is war justified?" or "Is it fair for our city to push the poor out of their neighborhoods?" Students work in collaborative groups to create a final product serving as the solution to the project's question and the teacher is constantly assessing students to determine their needs throughout the project. In an ideal PBL classroom, the teacher is the facilitator of learning and because the PBL environment shifts the focus of learning from "correct, indisputable answers to the process of converging solutions" the power, authority, and decisions are shared between the teacher and the students (Rogers, Cross, Gresalfi, Trauth-Nare, & Buck, 2011, p. 897). Additionally, students present their final product or creative idea to an audience of experts and professionals that understand the content the students are working on. PBL classrooms should be focused on student learning goals that focus on academic content and skills. There have been times when teachers have been assigning projects where the students are not seeing the value of the project because there is no purpose or connection to the outside world. When working in a high school setting, social media, drugs, and bullying can be major distractors in the classroom. In a PBL classroom, teachers can use these sensitive topics to develop projects for their students, but this has seemed to be rather difficult. This difficulty stems from many factors: (1) new to the teaching

profession, (2) new to the PBL environment, (3) new to teaching in a high poverty school, or a combination of them all.

The purpose of the action research study is to determine how teachers perceive the utilization of a more student-centered approach to professional development where I work collaboratively with teachers to plan and implement an authentic project. An additional purpose is to determine if the use of a student-centered coaching model will assist teachers with identifying student needs and how to use those needs to develop tasks within the project. Moving away from a teacher-centered professional development model where the focus is on what the teacher is or is not doing to a more student focused professional development model will allow me to serve more as a partner with the teachers and give them additional support with designing projects that are authentic, relevant, and purposeful for their students.

Action Research Design

In order to answer the proposed research question: *What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?*, action research was the methodology chosen by the teacher-researcher. Action research is a term that refers to a practical way to examine one's own work and determine if things are where they need to be (Mertler 2014). Because this form of research is conducted by the teacher-researcher, there is a great deal of self-reflection involved throughout the process. As a teacher-researcher particularly interested in improving staff development and teacher growth, I have to consider ways in which I can improve my own work as an instructional leader in the building. Through the process of action research, I can examine ways in which I can

continue to add value to the planning and implementation of projects done by teachers. During the action research process, it is important for teachers to inspect their own teaching practices to strive for improvement and, ultimately, increase student learning (Diana, 2011). Although I am not in the classroom on a regular basis, it is imperative that I improve my teaching methods to ensure that the teachers, which in fact are my students, continue to learn and grow. As the Instructional Specialist for the school, my position in this action research study is to work with the teachers to determine how Sweeney and Harris' (2017) student-centered coaching model impacts the implementation of PBL with this particular student population.

As stated previously, Dana and Yendol-Hoppey (2014) explain several factors that trigger an educational researcher to want to explore dilemmas in the classroom and how those factors increase the teacher researcher's desire for change. Kise (2006) expresses there is certain information a teacher wants from staff development:

1. Immediate applications
2. The impact of individual students
3. The details, not the big picture
4. A deep understanding of the theories and models
5. Implementation mechanics
6. A say in the plan
7. Substantive background materials
8. Proof that the changes are better than the present

Using the student-centered coaching model as a means to implement professional development for teachers implementing project-based learning afforded the teacher-

researcher the opportunity to give teacher-participants targeted training on their specific classroom needs. Sweeney and Harris report (2017) student-centered coaching allows the coach to partner with the teachers and work collaboratively to attain goals for students. According to the previously stated research on how teachers want to receive support, the student-centered coaching model provides a smaller setting for teacher learning. Additionally, the student-centered coaching model focuses on student data to drive instruction and the teacher and coach work together to analyze and make classroom decisions. Through this coaching model, teacher-participants are able to apply what is discussed during coaching sessions and receive feedback immediately. Additionally, through these coaching sessions, I can gain a better understanding of how the teacher-participants plan project-based learning units in the Digital Literacy classroom.

Design of the Study

The study consists of one coaching cycle with four teacher-participants from the Digital Literacy team, an integration of Integrated Business Applications and English 1. The action research cycle consists of the following steps: a) planning; b) acting; c) developing; d) reflecting (Mertler, 2014). These cycles will be described in detail as well as how they connect to the project-based learning model at MHS.

Development of the research plan. Historically, professional development for project-based learning has been provided in three different ways: (1) New Tech Annual Conference (NTAC); (2) Monthly visits from a New Tech Network Coach; (3) In-house professional development. The New Tech Annual Conference (NTAC) is offered annually and during the summer of 2018, only a select number of teachers were afforded the opportunity to attend. Additionally, four teachers were hired at the beginning of

August and training for them consisted of 2 full days of in-house professional development. The newly hired teachers and the teachers unable to attend the conference missed out on the learning that was offered at the summer conference, which inevitably caused gaps in their knowledge of project-based learning implementation. The coach from the New Tech Network visits once a month and provides observation feedback to teachers during the visit. The time spent with teachers is specifically designed to provide one-on-one support and teachers have expressed the value of having that time, but the coach lives out of state and is only available once a month. Previously, in-house professional development occurs during teacher planning periods once a month and at the monthly faculty meeting. During the in-house professional development, teachers have been working to understand exceptional project design as well as scaffolding strategies to use within projects. In-house professional development works well in some settings, however, it is difficult to determine if teachers master the content taught and can fully apply the knowledge learned to their own classroom.

Owing to the fact that the teachers value the one-on-one sessions with the coach and enjoy learning more about project-based learning implementation, I decided to infuse the three models and provide teachers with project-based learning training, however, in a one-on-one setting.

Acting. Mertler (2014) describes the second phase of the action research cycle as the *acting* stage. In this stage, I collected and analyzed the data found as I tried to answer my research question: What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school? In the text written by Mertler (2014), the design method involves

participants where there is no random assignment of groups. Intact classes were utilized to determine how the designed PBL unit was being implemented, therefore, creating a quasiexperimental design method.

Data collection. Four teachers, a part of a combined Integrated Business Applications and English 1 team, provided the sample for my study. Teachers were invited to become teacher-participants via an invitation letter (see Appendix A) created by the teacher-researcher. Once participants agreed to work with the teacher-researcher a consent form (see Appendix B) was provided in person at a meeting held in August of 2018.

Data collection was more qualitative in nature where interviews, field notes, and surveys were the primary sources of information. The data collection period took place during the first eight weeks of the fall 2018 semester and the teacher-researcher launched the coaching cycle using a student-centered coaching model where meetings took place during the teacher-participants' planning period. Sweeney & Harris (2017) believe, student-centered coaching focuses on the use of student data to make instructional decisions. During the student-centered coaching period, the teacher-researcher is viewed as "a partner with the teachers who is there to support teachers to move students" (Sweeney & Harris, 2017, p. 6). During week one of the coaching cycle, the teacher-researcher conducted a focus group interview (see Appendix C) of teacher-participants where they discussed their thoughts about professional development. The teachers were asked to discuss their likes and dislikes of the workshops/sessions they have attended in the past, as well as what types of support they would like to see for the school year. Mertler (2014) proclaims that it is imperative that each participant is allowed to speak so

that one person does not dominate the conversation. Each teacher was asked to speak so that everyone in the teacher-participant group could hear ideas and thoughts. The focus group interview used during the coaching cycle was led by the teacher-researcher but was semi-structured in nature and allowed the teacher-researcher the opportunity to ask follow-up questions (Mertler, 2014). After teacher perceptions were acquired, the first coaching session involved the group discussing the goals for student learning for their first PBL unit. Additional questions were asked such as scaffolding and assessment plans to meet the student learning goals.

During the coaching cycle, the teacher-researcher observed the teacher-participants classrooms where field notes (see Appendix D) were used and coaching session notes (see Appendix E) of participants took place. Mertler (2014) states field notes enable the teacher-researchers to account for what is seen in the classroom and those accounts allow for the teacher-researcher to begin to focus on what is important and interesting in the classroom. Using the information collected from classroom observations, the teacher-researcher also co-taught several lessons and co-planned with the teacher-participants. During the acting stage/coaching cycle, the teacher-researcher asked the teacher-participants their perceptions of classroom activities and those perceptions were discussed during the coaching sessions so the team could use the information to make data-driven decisions about scaffolding. At the end of the acting stage, a survey (see Appendix F) was provided to the teacher-participants so they can assess the value of the coaching cycle provided by teacher-researcher. Additionally, the teacher-participants discussed how their teaching was impacted as well as how student post-test assessment results were impacted as a result of the coaching cycle.

Analysis of the data. The teacher-researcher analyzed the results of the qualitative study using inductive analysis. Inductive analysis was chosen in order to "reduce the amount of information collected and to organize the data into patterns and themes" (Mertler, 2014, p. 163). By identifying the themes that arose during the data collection period, I was able to organize, describe, and interpret my results. Additionally, I was able to draw conclusions about my findings in the study.

The teacher-researcher used open-ended questions to create a semi-structured focus group interview of teachers during the data collection phase of the research. The analysis of this data involved transcribing the interview responses and categorizing the responses (Mertler, 2014, p. 162). The teacher-researcher also conducted semi-structured classroom observations where field notes were recorded. The observations were analyzed for themes and patterns and the field notes were placed into categories. Additionally, observation notes and informal interviews of students helped determine instructional moves for the classroom during teacher coaching sessions. A teacher survey was also given at the end of the coaching cycle and the results of the survey were placed into categories. After developing the categories for all of the collected data, I was able to create a coding scheme for my field notes and transcriptions. Upon rereading my data, I was able to describe the features of each category, which allowed me to see connections of my data to my research question.

The use of inductive analysis in my study allowed me to interpret findings in chapter four of the dissertation and determine the effectiveness of the chosen intensive coaching model on classroom implementation of project-based learning. Making generalizations to a wider population is not the focus of this study, but using inductive

analysis allowed the teacher-researcher the ability to determine the answer to the study's research question which describes if the model is the best way to provide professional development to the entire population of teachers at MHS in the future.

Developing. After the data collection is complete, Mertler (2014) states the next phase of the action research cycle is *developing*, which involves taking the results, interpretations, and conclusions drawn and develop action for future use. The created action plan may "consist of strategies for future implementation of the treatments, interventions, revisions and improvements to your instructional methods" (Mertler, 2014, p. 210).

The data from the acting phase allowed me to consider the necessary changes needed for future coaching sessions. Since the teacher-researcher is particularly interested in understanding how teachers plan and provide purpose in their planned projects, and the coaching cycle of the study involved coaching only one team of teachers, the data from the acting phase determined if future cycles should include planning with a different team. The data from cycle one was used to develop an action plan, which is addressed in Chapter Five.

Reflecting. The final stage Mertler's (2014) of action research cycle is *reflecting*. The author suggests the need for two types of reflection are necessary: 1) reflecting on intended and unintended outcomes and 2) reflecting on the action research study itself and the methods employed (Mertler, 2014, p. 220). Since the process of conducting action research is cyclical in nature, the teacher-researcher set aside time to reflect individually and review both of the necessary factors in order to determine changes needed for the coaching cycles. The teacher-researcher used information learned from the data analysis to reflect on what was learned about the process of teacher research

(Yendol-Hoppey & Dana, 2014). The reflecting process allowed me to truly see how teachers think as they are planning projects and furthermore, allowed me to find key ways to assist them in doing so. The reflecting phase also allowed me to determine if my study warrants use with other teachers in the building.

The results of the study were shared with the teacher-participants and the administrative team. Communicating my results "lends credibility to the process" and since MHS is a high poverty school, the information found from this action research study may assist other teachers in the New Tech Network (Mertler, 2014, p. 245). Because of this, the teacher-participant plans to share the results of the study at the annual New Tech Network Conference in the summer of 2019.

Summary and Conclusion

Implementing project-based learning in a high poverty school has presented a great deal of challenges. Although teachers and administrators alike have found that there are great benefits to students learning content through the PBL process, there are many structures and protocols needed to ensure effective implementation. The purpose of this action research study is to determine if the student-centered coaching model is perceived as beneficial for teachers as they plan and implement project-based learning in a high poverty school. The research question that guides the study is: *What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?*

The research question was answered by using Mertler's (2014) action research cycle of *planning, acting, developing, and reflecting* through one complete cycle of research. In phase one of the study, planning consisted of researching with the

administrative team and identifying the problem of practice followed by the development of the research plan. Phase two of the study, *acting*, consisted of the collection and analysis of data from two intact classrooms. Phase three of the study, *developing*, involved the creation of an action plan of improvement for future cycles of study. Phase four, *reflecting*, involved the sharing of results as well as an analysis of both the research question and the methodology.

CHAPTER 4

FINDINGS AND IMPLICATIONS

Chapter Four of this dissertation includes the findings and implications of an action research study conducted in conjunction with four teachers in their second year of PBL implementation, including data analysis strategies, coding, and themes associated with the findings. The chapter begins by explaining the identified problem of practice, the research question being addressed, and the purpose of the research. In this study, the researcher addressed the impact of the student-centered coaching model on the implementation of project-based learning in a high poverty school. The goal of the research study is to determine teacher perceptions of the coaching model as a form of professional development for the implementation of project-based learning and how the model made an impact on the four participants' teaching and understanding of project-based learning. A secondary goal of the study is to determine if student learning was impacted as a result of the implementation of the project.

The problem of practice identified for the action research study was the need for more targeted support for teachers implementing project-based learning in the classroom. Over a four year period of implementation, observation data showed implementation of projects in the classroom was leading to a lack of student understanding of purpose of the assigned tasks and a lack of relevant and authentic projects being launched in classrooms. Additionally, it was observed that there was a lot of front loading of content so students could complete a project instead of allowing the student progression in the project to

drive the content in the classroom. As the Instructional Specialist, I have had a lot of training in the PBL model and can observe when teachers fully understand how to implement the model with their students. When implemented well, students are driving their own work and the teacher is seen as the facilitator of learning not the dictator. Additionally, in a well implemented PBL classroom, the students can tell you the importance of their work and how the task they are completing at the moment leads them to their final product.

Many studies have been conducted that express teacher difficulty with PBL implementation. Baysura, Altun, & Yucel-Toy (2015) mention that one of the major problems associated with teacher implementation of PBL is the lack of targeted and intense preparation to assist them with how to implement with fidelity. Teo (2004) suggests when implementing a new curriculum model, a mindset shift has to occur not only in the teacher, but also in the students. This paradigm shift in instructional practices requires a different type of support teachers are not receiving in PBL schools. Tamin & Grant (2013) proclaim that project-based learning is multifaceted in nature and requires guidance and resources to support teachers as they choose appropriate instructional and assessment strategies during a project. Historically, teachers were receiving various types of professional development at the school level, but the development has not fully prepared the teachers for implementation. Additionally, teachers participating in this study only received support on project planning once during the summer of 2018. These identified problems led the following research question: *What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?*

This action research study was conducted in a school located in the Upstate of South Carolina where all students qualify for free breakfast and lunch. The school is currently in its fifth year of PBL implementation, however, many of the teachers implementing the curricular model are new to the school. The purpose of the action research study was to determine specifically how four teachers, all in their second year of teaching PBL, perceived the student-centered coaching designed by Sweeney & Harris (2017) and how the coaching model impacted project-based learning implementation and student performance in their classrooms. The teacher-participants were 9th grade teachers working in an integrated course called Digital Literacy. This course integrates the standards from Business Applications and English 1, where teachers work in a team to design standards-based projects from both content areas. Gaining insight on how teachers planned projects on their own, the teacher-researcher partnered with this team to determine what other supports may be needed with project planning and themes that may emerge about project implementation.

During the coaching cycle, data was collected in three ways. Teacher-participants completed a focus group interview, where information was provided about current professional development practices and needs. Secondly, observations were conducted in both Digital Literacy classrooms and field notes were recorded. These field notes were used as data to make instructional decisions during planning. At the end of the coaching cycle, the teacher-researcher and teacher participants analyzed and discussed student post-test data to determine project effectiveness and strategies that need to be changed and implemented for the next project. Lastly, the teachers completed a survey at the end

of the coaching cycle to determine effectiveness of the student-centered coaching model and how it impacted their understanding of PBL.

Details of the findings showed that teachers perceived previous professional development activities as helpful but lacked content-specific strategies or step-by-step instructions on how to scaffold content during a project. As a result of teacher-participants completing one student-centered coaching cycle, an increased level of knowledge of PBL implementation occurred. Teacher-participants also felt it was important for all teachers to participate in at least one coaching cycle. Additionally, student learning goals for the first project were met, however, the teacher-participants felt that not all students mastered the content standards addressed by the project. Implications of this study show student-centered coaching to be an appropriate model for teacher support and implementation of project-based learning, especially for teachers new to the curriculum model.

The Coaching Model

Diane Sweeney (2011) shares in her book that school-based coaching has been found by educators to be beneficial however, many individuals who act as a school-based coach worry about its effectiveness and how students are being impacted. Many coaches provide a very teacher-centered approach where they seek to provide assistance to struggling teachers in a marked attempt to make them better. Sweeney provides a more student-centered alternative where coaches work with teachers to focus solely on student work and the data the student work provides for the teacher. This emphasis on student achievement moves the role of coaching as more of a partnership and a collaboration between the coach and the teacher. As a coach enters into a coaching cycle with a

teacher, questions are asked to guide the discussion such as 1) What do the students know?; 2) What standards, curriculum, or program deems they need to know; and 3) How do we design and implement instruction to meet these needs? (Sweeney, 2011, p. 8). Many teachers struggle to put these pieces together alone and may benefit from the assistance of a coach who can be with them to make these curricular decisions. As the teacher-researcher, I worked with the teacher-participants to bridge the student-centered coaching model designed by Sweeney & Harris (2017) to the New Tech Network's PBL model in order to enable the teachers to have a better planning and implementation experience with their first project of the school year. The next section describes the project that was prepared using the student-centered coaching model.

The Project

When designing a PBL unit, the objective for students is for them to take ownership in the learning process and construct meaning on their own. Wentzel and Brophy (2014) state, student motivation should be at the center of project design as the students must see value in a project in order to be willing to enroll in it. This willingness to own the project comes from student interest, student needs, student culture and background. Madoyan (2017) shares the teacher's main role in PBL is to develop the realistic problem based on these aforementioned things and then fades into the background so students can solve the problem. Additionally, PBL experiences are authentic for students and mean something to them personally. In order for a project to provide a truly authentic experience for students, Larmer (2012) states the following:

1. The project meets a real need in the world beyond the classroom, or the products that students create are used by real people.

2. The project focuses on a problem, issue or topic that is relevant to students' lives, or on a problem or issue that is actually being faced by adults in the world students will soon enter.

3. The project sets up a scenario or simulation that is realistic, even if it is fictitious.

4. The project involves tools, tasks or processes used by adults in real settings and by professionals in the workplace.

After a teacher presents a project to students, or provides a project launch, the students should take on the role as problem solver and progress through trying to solve or answer the problem presented to them by the teacher. In a well-designed project, the teacher provides information and scaffolding tasks that help the students uncover necessary information and is not in control of giving answers to students. The students work in groups to analyze and compile the information they have gathered to make sense of it and develop the solution to the problem or their final product (Madoyan, 2017). Additionally, students receive feedback from the teacher and the teacher receives ongoing feedback from the students in order to make sure student needs are being met.

Based off of what the teacher-participants knew about planning a PBL project, the results of the diagnostic assessment given at beginning of the 2018 school year were used to create a project for 9th grade students enrolled in a Digital Literacy class, an integration of English 1 and Integrated Business Applications. The teacher-participants developed a project where the students had to create a Ted Talk to assist other teens with developing good habits and working to eliminate bad habits. The learning goal for students in this project was to enhance their reading, writing, and speaking skills through the use of

Covey's book *The 7 Habits of Highly Effective Teens*. Students were tasked to identify their own personal habit they want to improve and use the text to create a strategy to help other teens who may be struggling with the same issue. The data collection strategies outlined in this chapter of the dissertation express how we as a team came together during the coaching cycle to enhance this project's authenticity as well as the scaffolding tasks provided to the students during the project.

Data Collection Strategy

During this action research study, multiple forms of data was collected in order to identify themes and patterns that assist with answering the research question. Professional development is a necessary component of teacher support, however, the type of professional development provided in a PBL environment can take on many forms. In order to determine the best way to support teachers implementing PBL in a high poverty school, the teacher-researcher used the student-centered coaching model designed by Sweeney and Harris (2017). The teacher-researcher adapted the student-centered coaching model to fit the PBL classroom environment. This type of coaching, required the teacher-researcher to partner with teacher-participants and engage in one coaching cycle, where planning and implementation of one project took place.

Coaching PBL Teachers. Being a coach for over twelve years has provided me with many strategies for working with teachers, especially new teachers to the profession. Because I have been in the school for many years, I have acclimated to the culture of poverty and what it brings to the classroom. I also had my own classroom where I taught in a traditional way and had very high student achievement. However, when the curriculum model transitioned to PBL, I as a coach was learning the model as I was

expected to coach teachers through it. It was a challenge to learn the model and not be a classroom teacher using it on a daily basis. The one thing that remained consistent with the change was the culture of coaching that was already established within the school. The teachers expected support and welcomed it. Miller (2017) asserts that coaching must be viewed by teachers as non-evaluative in nature and that everyone has a growth mindset towards it. This type of culture provides a safe learning environment for teachers who may be uncomfortable with learning a new way to teach.

Because there is a paradigm shift required for teachers to learn PBL and all the structures and protocols that come with it, the coach also endures a paradigm shift. Coaches have to understand adult learning principles and work to create engaging experiences to address teacher needs and concerns about PBL (Gerdes, 2015). Vandenberg (n.d.) proclaims that adults come with a lot their own background knowledge and need to see how what they are learning connects to them personally. Knowing how adults learn is a necessity for a coach who is responsible for preparing teachers to work in a PBL classroom environment. Gerdes (2015) expresses that "an effective PBL coach uses the PBL model to teach the PBL model" (p. 2). Modeling effective PBL strategies ensures that teachers not only see how to make instructional moves, but it gives them an opportunity to try the strategies on their own. Teachers need to feel supported but also challenged to make instructional decisions for their PBL classroom. Additionally, teachers in a PBL classroom need to have the opportunity to do and reflect about their own classrooms.

The Coaching Cycle. Sweeney & Harris (2017) suggest coaches begin with a goal for working with teachers. The model involves what they call a coaching cycle, which

includes a minimum of one weekly planning session with a teacher and one to three times a week of coaching in the classroom. In this action research study, I as the Instructional Specialist designed my own version of a coaching cycle with this team of four teachers where in the beginning, the teacher-researcher invited the four teacher-participants to take part in a focus group interview. During that interview, several questions were asked about student learning goals, the authenticity and relevance of the project, and how we as a team will know the students met the goals of the project. This initial interview served as a time where the teacher-researcher could also get the teacher perceptions of professional development and the type of support they would like while implementing the project. After the focus group interview, the team began the project planning phase, where scaffolding and assessment plans were made for students. Prior to launching the project with students, MHS follows a protocol where teachers have to present their project details to their peers. This protocol is called "Critical Friends" (See Appendix H) and this allowed the team to receive feedback on the project design from members of the faculty and staff. According to Bambino (2002), Critical Friends promotes teacher collaboration and student learning through a protocol established to provide cool, warm, and hard feedback on project design. The protocol is timed in nature, where teachers present their project to their peers and receive likes, wonders, and next steps to consider prior to launching the project. This feedback was used by the teacher-participants to make adjustments and enhancements to the project planning toolkit (Appendix I).

The students had completed a comprehensive benchmark assessment covering the majority of the standards being addressed in English 1. This benchmark assessment was analyzed and was used to address student weaknesses during the project implementation.

Some of the questions used in this comprehensive assessment served as pre-test data for the project. During the beginning, middle, and ending phases of the project, the teacher-researcher not only used field notes to record observations, but also co-taught twice a week with both teacher teams. Planning sessions occurred twice a week to discuss evidence provided by student work and that evidence assisted the team with making the instructional moves needed for student growth. During planning sessions, conversations were not only centered on student work and actions, but conversations about task purpose and relevance to the project were also discussed. Students were constantly assessed throughout the entire project and at the end, the students took a post-test on the content covered in the project.

At the end of the coaching cycle, the teacher-participants reflected on the student post-test data and took a survey to determine their perceptions of the student-centered coaching model. The teacher survey served as a way for the teacher-researcher to determine the effectiveness of using coaching cycles as a form of professional development. Although other forms of professional development took place during the acting phase of the research, the information received from the teacher survey took into account the perceptions of teachers receiving intense small group training. The student-centered coaching model was a different approach and those perceptions provided valuable information on how to proceed with other teachers in the building. Student pre-test and post-test results served as a secondary data source which was quantitative in nature and would assist the team with determining if the student learning goal was achieved.

Ongoing Analysis & Reflection

This action research study aimed at determining teacher perceptions of the use of the student-centered coaching model by Sweeney & Harris (2017) as a means of professional development for teachers new to implementing project-based learning in a high poverty school. The model includes the use of coaching cycles to provide assistance to classroom teachers as they plan, assess, and develop lessons for students. The four teacher-participants included in the study teach 9th grade Digital Literacy, an integrated English 1 and Integrated Business Applications course. The study began with a focus group interview where the teacher-researcher asked the teacher-participants five questions. The interview provided a baseline for how the teachers view professional development received in the past and how it has influenced their teaching practices in a PBL environment. The focus group interview ended with teachers sharing what they want from their professional development experiences. The results of the interview provided me with insight on how to structure their coaching cycle.

Based off of results of the focus group interview, it is clear that the teacher-participants appreciate when professional development sessions include modeling of PBL strategies and practical strategies that can be used in the classroom. All teacher-participants enjoy hands-on learning experiences that they can apply immediately to their own classrooms. Additionally, all teacher-participants felt that the professional development they have had in the past has influenced their teaching practices as it relates to PBL. Furthermore, there was mention of wanting professional development to occur in smaller group settings or to be iterative and applicable to their specific content. The focus group interview makes me believe that the coaching cycle would be beneficial for

these teachers and they will perceive it to be a necessary component of the professional development I provide.

Moving into the coaching cycle provided a lot of insight on how this team of four teachers plan together as a team. I was not involved in the beginning phases of planning of the project to prepare for the Critical Friends session. All four teacher-participants met together the week before the students started school to create the project plan. Initially, I was under the impression that the teachers knew how to create an authentic project and the necessary steps of unfolding a project with students, but as I planned with the teachers the first couple of weeks of project implementation, I found that the teacher-participants did not have a clear idea of what they wanted the students to produce. It was not until week three of project implementation that a clear final product was established. As the Instructional Specialist and the person responsible for providing professional development for teachers, I noticed that the teachers start projects with students without having an end in mind. Additionally, during classroom observations, the students were unaware in the first two weeks of what the project was about and what they were to present as a final product. This leads me to believe that because the teachers were unsure of the student learning goal for the project, the students were unclear.

As a result of the beginnings of the coaching cycle, I noticed that I could not truly start the coaching cycle the way in which I initially planned. The teacher-participants needed more than just to answer questions about what they were going to do during the class period. The teacher-participants also needed more than me just coming in to model PBL for them so they would see it in action. The teacher-participants needed me to push them to think about the end of the project first and what the students were going to

produce as a final product. Also, because the project was already planned by the teachers before I started the coaching cycle, the teacher-participants needed assistance with discovering the authenticity of the project. This discovery should have been made prior to the project launch with students, however, this had to become a big focus during the coaching cycle. Because of this, the coaching cycle should have started with the planning of this initial project and not after the project was planned by the teacher-participants.

Reflective Stance

As I pause and reflect on this action research study, I realize that the data collection strategies have given me a great amount of information. The focus group interview confirmed that the four teachers need a small learning group that is collaborative in nature. They all expressed the need to be able to find relevance in the professional development so they could make a connection to the learning and then apply that learning to their classroom. By me observing and recording field notes, I have the ability to see the teachers use the strategies discussed in planning and then give them feedback during coaching sessions. In the beginning of the project launch, my field notes allowed me to see a recurring theme that was existing in both classrooms. Students were initially unable to tell me what the project was about and what their final product was going to be. After noticing this theme, I was able to bring this up as a topic of discussion during the coaching session. We as a team asked ourselves why we felt this was happening and together we came to the conclusion that we did not fully understand what the project was about and how the students were going to answer the driving question. Because we were able to discuss the data collected in my field notes, we were able to redirect our instructional strategies and work to deepen our own understanding of the

project purpose and how to articulate that to the students. This theme also provided evidence that the coaching cycle should have started earlier. I should have been with the teachers during the planning of this project in order to fully develop this project prior to launching it with students.

After we provided more information to the students in week three of the project, the field notes showed the students were able to communicate the project purpose and the final product. One of the data pieces that I feel I missed was asking the teachers ahead of time about their structure for planning meetings. One of the initial themes that has come up is how often teachers become distracted or get off task during planning. I should have asked them for a sample meeting agenda to see if they have a protocol or structure they used for keeping their meetings focused on planning. Having this ahead of time would have allowed me to know if an agenda needed to be created together prior to the project launch. As a result of this, in week four of the project planning, I have developed a protocol to use during planning to keep the team focused and on track. Another step that was added to the coaching cycle was a time for the teachers to eat lunch and have adult conversations with each other in a relaxed way. By allowing them this time, they were able to work on their relationship with each other and enjoy time to be away from the project work.

During week four of the project implementation, I noticed that the project was moving slowly and the amount of time given to students reflected low student expectations. Classroom observations and field notes showed that the students were given two to three days on average to complete one task. As a result of this data, the team decided to create a benchmark timeline to move students to the final product in a

timely manner. This theme provides even more evidence that the coaching cycle should have started prior to the launch of the project. If I could have been a part of the initial planning process, the benchmarks could have been established and due dates could have been presented to the students ahead of time.

Data Analysis

Prior to the coaching cycle starting, a focus group interview was conducted on August 14th to get an idea of what the four teacher-participants feelings were about the current professional development model they had been a part of at the school. Each participant had the opportunity to answer five questions and the transcription and analysis led to the teacher-researcher believing that these teachers would enjoy a small group setting where they could have a hands-on experience for professional development. The initial question asked their thoughts on their experiences they have received during their first year of PBL implementation. All four teacher-participants noted that the experiences were meaningful and they enjoyed it when PBL was modeled so they could use the practice in their classroom. However, when asked what they felt their professional development experiences lacked, the answers included: 1) specific to subject-matter; 2) team emphasis; 3) how to unfold a project from start to finish. Additionally, when the four teacher-participants were asked what they would want their professional development experiences to look like they all stated they wanted it to be specific to their subject-matter, interactive, and straight to the point. An initial pattern that emerged from the focus group interview is that the four teacher-participants would feel more comfortable and more prepared for PBL implementation if they had less whole group sessions and an increased number of small group sessions. Furthermore, these four

teachers seem to enjoy having professional development that is specific to their needs and not generalized for the whole teacher population in the building.

The Digital Literacy team includes two teams of two teachers, where the first team is a male with one year of classroom teaching experience and a female with fifteen years of classroom teaching experience. The second team includes a male and a female, where both teachers have one year of classroom experience. Each team has their own Digital Literacy classroom where they provide instruction to their own groups of students. The team met during the week of August 13th, which was the week prior to the students arriving at school, to plan their first project. The teacher-researcher did not join the team until August 20th to start the coaching cycle. Figure 2 shows a sample weekly schedule used for the coaching cycle.

Coaching Schedule – Digital Literacy					
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
1st Period 8:45-10:15			Observation/Co-Teach Elizabeth/Joe		
2nd Period 10:20 – 12:00	Observation/Co-Teach-Amy/Harry				
Lunch 12:00 – 12:30	Lunch Duty	Lunch Duty	Lunch Duty	Lunch Duty	Lunch Duty
3rd Period 12:30 – 2:00	Digital Literacy Coaching Session		Digital Literacy Coaching Session		
4th Period 2:05 – 3:45	Observation/Co-Teach Elizabeth/Joe		Observation/Co-Teach-Amy/Harry		

Figure 4.1 – Coaching Cycle Schedule

After the coaching cycle began, coaching sessions were held during the 3rd period block, which was the team's designated planning time. That planning time began at 12:30 pm and ended at 2:00 pm on Mondays and Wednesdays of the coaching period. Field notes were collected by the teacher-researcher by observing both team's classrooms during different times of the day. During each coaching session, not only were field notes discussed but the teacher-participants were asked questions to guide each discussion. The teacher-participants were asked their learning goal for students during each session, however, the first two weeks of the coaching cycle resulted in the development of the purpose of the project. Themes that emerged from the observation field notes for weeks one and two of the coaching cycle were the students were unable to articulate the purpose of the project, the purpose of the tasks they were completing, or the final product of the project. These themes resulted in student data that was used in coaching sessions. During week two, it became clear to the team that the purpose of the project was not understood by all teacher-participants prior to launching the project with the students and because of this, during the fourth coaching session, the team finalized the purpose of the project and the benchmark details. Using the student data helped the team to realize that there were some missed steps in the planning process and there was a need to provide the students with additional directions during week three of the project.

The first few weeks of the coaching cycle led me to believe that when students do not understand the purpose of the project or understand the reason they are completing a project, it is because the teachers themselves are not clear. Because the teachers are not clear, it is very difficult to articulate that necessary information to students. This analysis

lead to an even greater belief in the need for small group, student-centered professional development.

The coaching cycle continued until October 10th and using field notes as a means of data collection helped the teacher-researcher and teacher-participants to clear up misconceptions throughout the project. It was very evident throughout the partnership with the teacher-participants that students lacked clear direction in the beginning of the project because the teachers lacked clear direction. It was also evident that many misconceptions could have been cleared up if I had the opportunity to plan this initial project with the teacher-participants prior to launching. The focus group interview provided great insight that the teachers wanted a small group setting for professional development and I believe that to be beneficial as well. As I planned with the four teachers and had the opportunity to co-teach with the four teachers, I realized that modeling good instructional practices is not enough for teachers to truly understand PBL implementation. These four teacher-participants benefited greatly from the planning conversations focused on students. The data the student work provided and the data from my field notes provided sufficient evidence for planning instructional moves. We as a team decided on supports needed, lessons needed, and additional assessment opportunities needed by students. The emerging theme evolved from this study is in order for teachers to implement PBL in an authentic way, they need at least one coaching cycle with someone who is an expert.

Coding

After spending eight weeks with the four teacher-participants of the Digital Literacy class and collecting data in three forms, I began to create an idea of what I

learned by creating a coding system. Mertler (2014) describes the coding system as a system of categorization that a researcher may use to identify similar types of information to identify patterns or themes that emerge from the research.

Focus Group Interview

During the data collection period, I started with a focus group interview where the four teacher-participants answered five questions related to their professional development experiences. In the focus group interview, each teacher had an opportunity to discuss their thoughts on each question.

Question #1: You all have spent one year of implementing project-based learning. What are your thoughts on the professional development you have received?

Amy: My professional development experiences have been meaningful in that my coaches have instructed us well by modeling PBL as they have facilitated learning.

Elizabeth: They have provided me with opportunities to implement the activities in my own classroom that we complete in PD.

Joseph: Most of it has been very good with practical classroom modeling and application. At times it seems a little too fluffed up to meet time requirements but for the most part I walk away having learned something.

Harry: I get the most out of the PD that is ran in small group. I do not like entire staff PD at all.

Question #2: What do you feel you have gotten out of your professional development experiences?

Amy: I have become a different and better instructor.

Elizabeth: Hands-on activities that allow a teacher untrained in PBL to effectively communicate to their students how to execute their projects

Joseph: I have gotten ideas that I can take to the classroom.

Harry: Group specific PD especially when it is subject-specific

Question #3: How has professional development influenced your teaching practice?

Amy: I have used all of my professional development in my teaching and it has been essential since I had zero knowledge of PBL.

Elizabeth: It has made me more self-aware of what I need to do to be more effective at implementing PBL

Joseph: I have learned new instructional strategies that have been modeled in PD sessions

Harry: It is has provided guidance and direction and clarification

Question #4: What do you think professional development you have received on implementing project-based learning has lacked?

Amy: More specific examples in my content area

Elizabeth: Application of unfolding a project and the steps

Joseph: Some of the PD I have received has lacked practical application to my content

Harry: Specific subject and team emphasis

Question #5: What would you want your professional development experiences to look like?

Amy: I would like to do more planning with my subject area

Elizabeth: Interactive and applicable to what I am doing in my classroom

Joseph: To the point without the fluff and modeling ideas and classroom practices

Harry: More application to my subject matter and less whole group

As a result of the focus group interview, a coding scheme was developed based off of the responses received by the four teacher-participants. Figure 4.2 below defines that scheme.

Coding Scheme	Description
NWG	No whole group professional development
MOD	Modeling of strategies, hands-on, and scaffolding tasks demonstrations
STM	Specific to my own classroom or subject-matter

Figure 4.2- Coding Scheme

Field Notes/Coaching Sessions

Mertler (2014) states that field notes are used during action research to "record in detail what is seen and heard." (p. 41). While implementing this project with the four teacher-researchers, it was necessary to record classroom observations as a means of data for project planning. The field notes afforded me the opportunity to ask students questions, hear student conversations, look at student work during the class period, and watch how teachers were implementing the project with students. The field notes were recorded during the class period and those notes served as data to be used during each coaching session. During coaching sessions, patterns were discussed in order to make instructional moves for the week. Each field note I recorded during classroom

observations fell into one of three categories and Figure 4.3 outlines those categories that were addressed during each coaching session.

Coaching Session August 20, 2018

What is the student learning goal for this portion of the project? What data is this goal based on?

Amy: The goal of the project is to develop a project where students learn to communicate effectively in written form and oral form.

Harry: We want to make sure the students can get in front of an audience and speak for the first time.

Elizabeth: Yes, we want them to be able to do a presentation.

Coaching Session August 27, 2018

What is the student learning goal for this portion of the project? What data is this goal based on?

Joseph: For the students to understand the purpose of the project and what they are to do.

Amy: What is a TED talk and what makes a good TED talk and what goes into a speech.

Elizabeth: Students creating a TED talk that identify their bad habit and discuss how they broke the habit. Must connect to 4 of the 7 habits

Teacher-Researcher Field Notes: August 27, 2018

In this classroom, there seemed to be a lot of time where nothing was going on. It did not seem to be really tight in terms of planning. The teachers did take turns with presenting information. I feel that planning with this group needs to be more structured and organized. During class time, may have given the students too much time to work on the assigned tasks. The students could have moved on to watching their videos.

No plan for early finishers at this point in the project.

Coaching Session August 29, 2018

What is the student learning goal for this portion of the project? What data is this goal based on?

Harry: Getting students to realize what the project is about and making connections between the daily tasks.

What instructional practices will be used to most likely produce the desired student learning goal?

Elizabeth and Harry: We will create an entry document for the students to read that connects the tasks they have been working on all week to the project. That entry document will have key words and vocabulary for students to make the connection.

Teacher-Researcher Field Notes September 26, 2018

Amy/Harry's classroom: When asked what are they to do next, the students did not know or they were doing something else. A couple of students said they were done with their Ted Talk. One student was surfing the internet and one was drawing. Some students were just walking around or standing at the door. How do we get students to move forward through the project without us telling them to move forward? One pair said the teachers have not told us what to do next because we are finished.

Elizabeth/Joseph's classroom: All of the students were on task and had a meaningful experience. The students that I worked one-on-one with were able to articulate what they were doing and how they were going to translate that into a speech. There was only one student that seemed to be a little fuzzy about what the expectations were or how she was going to accomplish her speech. There was structured work time and there was a task due at the end of the period.

Coaching Session October 1, 2018

How will we connect these instructional practices to the purpose of the project?

Harry: The connection is coming from the students completing the benchmarks. Each day they will be working towards creating their final product.

Elizabeth: We are definitely needing to go ahead and try and end this project because it has been going on for a long time. Let's try and create a plan to get the project done by October 10th.

Coding Scheme	Description
PUR	Understanding of the purpose of the project or scaffolding task being assigned
DIS	Student discovery of information
TIM	Timing used within the 90-minute block

Figure 4.3 – Coding Scheme

Teacher Reflection Survey

At the end of the coaching cycle, the four teacher-participants took a reflection survey that gave me insight on their thoughts of the student-centered coaching model. The survey was a combination of Likert scale questions and four open-response questions. The Likert scale questions were created by the teacher-researcher and required the four teacher-participants to answer using a scale of 1 to 5, where 1 was strongly disagree and 5 was strongly agree. In Figure 4.4, a summary of the results show how the teacher-participants responded to the questions. The open-ended questions provided a

more detailed understanding of the teacher's perception of the student-centered coaching model and how it impacted their understanding of PBL. In Figure 4.5, the coding scheme of the results show that the answers fell into three major categories. Each category represents specifically the overall theme of how teachers felt when they had an opportunity to work one-on-one with an expert in PBL implementation.

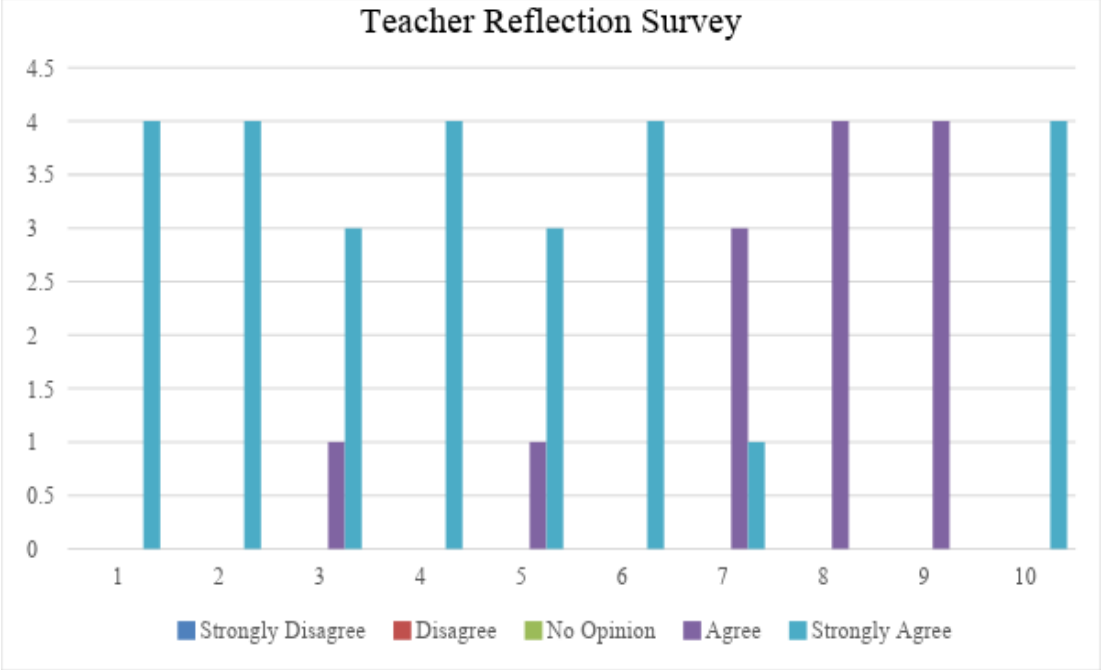

Figure 4.4 – Teacher Reflection Survey Results

Coding Scheme	Description
SPE	Specific to the group's needs
BEN	Beneficial for the group and all other teachers
DEV	Development of ideas and understanding of PBL and authenticity.

Figure 4.5 – Coding Scheme

Data Interpretation

Theme one. It was evident from the action research study that the teachers found value in participating in a coaching cycle using Harris and Sweeney's (2017) student-centered coaching model. Based on the focus group interview, the teachers appreciated professional development that was specific in nature to their content and developmental needs and did not find value in professional development that was whole group. All four teacher-participants were looking for learning opportunities that would help them with their own content and was not generalized to the whole population. Joe, the male teacher-participant working with Elizabeth mentioned whole group does not address everyone's need and he really benefited from being able to ask questions without doing it in front of the whole staff. As previously stated in Chapter 2, Dunne (2002) proclaims that professional development cannot be done in a way that fits every teacher in the building. The teacher-participants in this study echo this by providing an overwhelming response that they want to learn in an environment that is specific to their needs. Additionally, the four teacher-participants enjoy having various strategies modeled for them so they can use them in their own classroom. During the coaching cycle, strategies were discussed and immediately used by the team in the classroom. Desimone (2011), mentions a specific structure for teachers to have when they are learning. That structure includes practice and observation and during the coaching cycle, the teacher-participants had an opportunity to observe me working with students or providing a mini lesson to a small group of students.

Theme two. During the beginning of the coaching cycle, it was evident that the teacher-participants had planned the project on their own and used the background

knowledge they had about PBL to do so. After the first week of classroom observations, I noticed the students were unaware of the project's purpose and what they were to do as a result of the project. When asked, many students did not know they were in the middle of a project or what question they were to answer in the end. As a result, I focused the group in on the student data that was provided to me and worked with the group to develop a plan of action. The group decided that they were unaware of what the final product was going to be in the end and that we as a group needed a better understanding of the project. Ertmer and Simons (2005) share novice PBL teachers often encounter difficulties with all aspects of PBL implementation, including the planning piece. It was evident that the teacher-participants had thought of a project idea but had not solidified the authentic purpose or the final product for the students to complete. After spending several planning sessions working to provide a clearer purpose to the students, the observations began to show that the students were understanding the purpose. Additionally, the teacher-participants began to recognize how important the initial planning of the project and the scaffolding plans are to the overall success of the project.

Theme three. After conducting one full coaching cycle with the four teacher-participants, I was able to understand how beneficial a small group professional learning setting was for teachers who are new to the PBL model. The teacher-participants appreciated the focus on students and how they need to release control and let the students drive the project. Nussbaum-Beach (2015) proclaim teachers want professional development that allows them to collaborate and speak honestly. It was evident that this group of teacher-participants wanted a time for them to work as a team and to work with someone who would challenge their teaching practices and their thinking about PBL.

There were several times when I asked the group hard questions about students and they would have to think together to determine the answer. The teacher reflection survey results proved teachers in this action research study appreciated having a coaching cycle and additionally felt all teachers should participate in at least one cycle.

Answering the Research Question

This study was grounded in literature that focused on the nature of high poverty schools and how students living in poverty need educational experiences that provide real world tasks and purpose for learning. Being that project-based learning is the curriculum model of choice for the research site for the achievement of these types of experiences, the literature discusses the theory of PBL and how teachers may grapple with the idea on how to fully implement PBL in their classrooms. Knowing the nature of the student population served and the struggles teachers may have in this type of learning environment, the literature also addresses that teachers need a unique type of support that enables them to not only provides learning opportunities that meet their specific needs but also provides feedback for growth. This action research study set out to provide both for the four teacher-participants.

The research question addressed in this study was *What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?* At the close of the study, I began to see three overarching themes emerge as it relates to the style of professional development need for teachers implementing project-based learning in this particular school. Teachers in this study perceived the student-centered coaching model as beneficial to their unique learning needs because it was specific to their content and their project. The four teacher-

participants appreciated being in a learning setting that was small group and have the opportunity to learn and grow with an expert in PBL implementation. The teacher-participants, I felt, understood the premise of PBL but were unclear on how to truly plan and implement with their students. Because of this, a new possibility for this group would be for me to plan the project with the team from the beginning, participate in their Critical Friends session, and continue another coaching cycle to see the project implementation to the end. One of the most eye opening themes that emerged during the study came through at the very beginning. When the students in the classroom could not articulate the purpose of the project and then the group was having the same problem led me to see that it is imperative to think through and plan the project together before starting the coaching cycle. I feel that this problem created an error in the study because the coaching cycle became more reactive in the beginning instead of proactive. Trying to establish an end product in the middle of implementation caused the coaching sessions to be more focused on reestablishing purpose with the students instead of other important factors.

Summary and Conclusion

This chapter presents the findings of the action research study conducted in a high poverty school implementing project-based learning as a curriculum model. The study included four teacher-participants working to integrate the standards from Integrated Business Applications and English 1. In the beginning of the study, the teacher-participants engaged in a focus group interview with the teacher-researcher and as a result of the interview, it was evident that the participants were looking for professional development that was specific to their needs instead with the whole staff. This led the

teacher-researcher believe that the participants would perceive a more focused approach to professional development as beneficial.

During the coaching cycle, planning sessions occurred two days a week and co-teaching/classroom observations occurred two days a week. This part of the coaching cycle was not only informative for the group but also allowed the teacher-participants to receive feedback on the scaffolding plans developed during planning. Planning with the team of teachers allowed me to understand how teachers plan projects and how they use student data to plan their projects. The teacher reflection survey results prove that teachers perceived the coaching cycle to be very beneficial not only to their growth and development but to the growth and development of their students.

The findings of this study led the teacher-researcher to contemplate how professional development is offered in this particular school. The teachers in this study expressed an appreciation for having a more focused approach, but I as the teacher-researcher also learned a lot from this experience. I learned individual gaps in knowledge of PBL implementation and also found that the coaching cycle needs to start earlier than the implementation phase of the project. Other teachers in this learning environment can benefit from participating in a coaching cycle and as the implementer of professional development, using the student-centered model seems to be an effective approach for future use.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND ACTION PLAN

Chapter Five of this dissertation in practice is designed to present the overarching themes that emerged as a result of four teachers of 9th grade students participating in a student-centered coaching cycle while implementing Project-Based Learning (PBL) in an integrated English 1 and Integrated Business Applications course. A detailed action plan is also provided to continue to move Monarch High School forward with PBL implementation and how the student-centered coaching model can be used to provide a deeper level of support to teachers in the building. The school in which the study took place is one with 100% of the student population participating in the free breakfast and lunch program and is situated in the Upstate region of South Carolina. Prior to participating in the eight-week study, the four teacher-participants engaged in a focus group interview where they expressed their needs of professional development and their feelings of their understanding of PBL. The teacher-researcher tailored the coaching cycle based on the needs spoken of by the teacher-participants and during the coaching cycle, the teacher-researcher assisted with the planning and implementation of the teacher-participants' first project of the school year. At the end of the coaching cycle, the teacher-researcher created a survey to mark the feelings about the coaching model and how the teacher-participants' understanding of PBL changed.

After four complete school years of PBL implementation, it was evident from classroom observations and conversations with teachers that the implementation of PBL

was still a challenge for several teachers. Many teachers were new to the building and several were new to the profession or were obtaining their certification from an alternative education program. MHS had experienced a massive amount of teacher turnover and providing training for teachers in a whole group setting had become very cumbersome. Additionally, it was very difficult to provide professional training to meet each teacher's individual need. These problems led the teacher-researcher to this action research study, which was designed to answer the question: *What are teacher-participant perceptions of the use of a new coaching model as a means of professional development in a high poverty, project-based learning school?* The purpose of this study was to change how professional development takes place at MHS in order to meet the PBL implementation needs of each individual teacher in the building.

At the beginning of the coaching cycle, the teacher-participants engaged in a focus group interview where they expressed specific learning needs in order for them to know more about PBL implementation. The biggest need indicated by the participants was for professional development to be relevant and specific to their own classrooms. Additionally, the teacher-participants expressed the need for learning to take place in a small group setting. The teacher-researcher used the expressed needs and developed the coaching cycle where sessions only included the four participants.

The teacher-participants developed a project during the summer where the students were tasked to create a Ted Talk based on Covey's book *The 7 Habits of Highly Effective Teens*. Since the project was already planned by the teacher-participants prior to the coaching cycle start, the teacher-researcher assisted with the implementation. As the project progressed, the team met two times a week for one hour to plan the daily

experiences for students. Additionally, the teacher-researcher co-taught lessons in each classroom two times per week. There were several occasions where the teacher-researcher modeled how to use student assessment data to create lessons related to the project or modeled whole group lessons for students. During the planning sessions we engaged in conversations about the modeling and we would discuss next steps for the project. Having a difficult beginning, the coaching cycle lacked depth because the teacher-participants had a hard time understanding their own purpose for the project. The first two weeks of the cycle was devoted to the team developing a final culminating product and an authentic purpose for the project. With that said, the majority of the coaching strategies used by the teacher-researcher were questioning techniques. The teachers had to answer questions throughout planning sessions such as "Why do you want the students to create a Ted Talk?" and "Who are they creating this Ted Talk for?" and "Why would students care about doing this? and "What standards are you addressing during this project?" Once the team established the final product and purpose, the remainder of the coaching cycle focused on the day-to-day tasks the students would complete and the daily pacing of those activities.

It was evident to the teacher-researcher that the teacher-participants needed more support with PBL implementation. The teacher survey results completed at the end of the coaching cycle showed three questions that the teacher-participants did not strongly agree with. Those questions were as follows: 1) My knowledge of project-based learning implementation has increased as a result of the intensive coaching; 2) The collaboration positively impacted the students, and 3) My students met my goal for learning during the implementation of this project. Because some of the team did not have strong agreement

about these three questions and how difficult the coaching cycle was in the beginning, the teacher-researcher had additional thoughts to consider about the use of the student-centered coaching model as a means of professional development.

Key Questions

During the implementation of the team's first project of the school year, the authentic problem established was for students to learn effective habits for high school and beyond. The project integrated state standards from Integrated Business Applications and English 1 and included students reading *The Seven Habits of Highly Effective Teens* while also learning employability skills such as work practices and professionalism. The project planning toolkit (Appendix G) was designed prior to the coaching cycle and the final product of the project was not solidified before the teacher-participants launched the project with their students. Once the coaching cycle began, it took approximately two weeks to uncover the culminating event for students. In a well-ran PBL classroom, the students are introduced to the project and its final product during the launch so the students are able to articulate the goal or purpose of the project as a result of the project launch. However, our students were unaware of the project's goal or why they were trying to learn effective habits. Additionally, the students were unaware of who their audience was for the TedTalk. All of these struggles led to the creation of a second project launch document (Appendix I) so the students would have a better understanding of what they were working towards. During the planning sessions, we spent a lot of time working out the details of the purpose of the project and struggled to truly determine student individual needs during implementation. In the end, the students were able to video themselves creating a TedTalk, however, the video was not shown to anyone

outside of the building, which removes some of the authenticity and purpose for the project.

After completing an eight-week coaching cycle with the four teacher-participants and analyzing the survey data, there were many questions that emerged which led to the creation of an action plan.

1. Would teachers feel better about PBL implementation if the coaching cycle started at least two weeks prior to project launch?
2. Would collaborating (planning, assessing, and instructing) with teachers during a coaching cycle for more time during the week impact their feelings of support?

Action Researcher

Curriculum can be used to create a school community by having a focus that is clear and concise (Sergiovanni, 1994). Having PBL as the chosen curriculum model, it is especially important to foster such an environment as a curriculum leader and a clear image of both teacher and student roles in curricular decisions is imperative. Assisting teachers to make pedagogical decisions suitable for student growth as well as providing the necessary resources for all learners to thrive, is where I believe the foundation begins. As an insider, I am assigned to coach new teachers on the basic structures and protocols associated with creating a PBL learning environment. This cumbersome task requires me to provide professional development to teachers entering the building who have never learned by doing PBL themselves or taught in this manner. Additionally, my insider role involves me acclimating new teachers to working with students who live in poverty.

Due to the PBL curriculum model in the school I am working in, many courses taught are integrated and the teachers work in teams of two or four. Pedagogical decisions are often made in planning meetings and teachers collaborate to create scaffolding plans for students. One of my insider roles during the coaching cycle planning sessions was to assist the group in establishing their identity by guiding them to create group norms and routines. In the beginning, this was quite necessary because the teacher-participants struggled with staying on task and were easily distracted from the planning process. Eventually, in order to avoid taking on an authoritarian approach and remaining in the role of co-teacher, I asked questions and provided possible suggestions as I worked to encourage shared decision-making amongst teacher-participants (Hannay & Seller, 1991). Using questioning techniques to assist the teacher-participant team to establish their own routines and protocols for planning helped the team to have more focused planning meetings. I also provided support as the group created a shared vision for the final product for the project. Brubaker (2004) shares "When there is a shared vision, all are proud to be a part of the organization" (p. 80). Once we were able to establish a clear direction for the project, the teacher-participants seemed to find it easier to plan learning experiences for the students. When working on creating an authentic experience for a project-based learning integrated course, oftentimes there are no project examples to work from. Teachers are creating projects from scratch and it is important for those projects to have a purpose that students find relevant. My role as an insider in this action research was to work with the teachers to create a shared vision for the project and assist with developing a direction we can all work towards.

The current action research study sought out to provide teachers with intense coaching during their planning sessions and as a result of the action research study, I plan to determine if the intense coaching model I have chosen is the best way to provide all teachers in the school professional development. Dematthews (2014) views the process of curriculum leadership, evaluation, and redevelopment as a colossal endeavor that must include a variety of stakeholders and be guided by a well-developed plan. As a member of the Administrative team, I was also an outsider in this action research study. I am viewed as an evaluator and leader in the building. Because I was coaching teacher teams, I had to create a plan for creating collegiality during coaching sessions, opportunities for teacher voices to be heard, and ways in which teacher creativity in project design could be expressed without taking over. Doing this allowed me to build trust throughout the process so the teachers did not view me as a person telling them what to do but as a partner working with them to create an authentic learning experience for our students. Oftentimes during planning sessions, I had to find balance between being an outsider and an insider. I would ask a question such as "What is the goal for student learning today?" and I would just listen to their responses as they determined together what the answer was. However, on most occasions I acted as an insider where I assessed work, taught lessons, and planned the daily activities.

The effectiveness of professional development when implementing a new curriculum model is very important. Using a relational approach to professional development that involves teachers in the curriculum development process will help to ensure the responsiveness of the curriculum to the needs of concerned stakeholders (Albashiry, Voogt, & Pieters, 2015). My action research study was devised so teacher

teams had a say in their project building process and as a result, they enjoyed their professional development experience.

Even though the action research study led to positive reactions from the teachers, there were challenges that I faced as an action researcher. I was unable to plan with the teachers during the summer because of my other leadership responsibilities. Because I was not there for the initial planning, I was not able to work with the teachers ahead of time to plan for purpose and authenticity. This led to a project launch that lacked relevance, purpose, and authenticity. Additionally, the first two weeks of coaching sessions were devoted to establishing these key concepts and two full weeks of quality PBL implementation was lost in the classroom.

One of the teacher-participants has over 15 years teaching experience and it was a challenge to co-teach and co-plan with her. There were many times when she gave all of the answers or suggested all of the activities for the project and tried to dominate the planning sessions. This teacher-participant had a hard time with understanding the PBL process and would insert her own ideas of what PBL implementation should look like in a classroom. As one of the leaders in the building but as a researcher, she often made it very difficult work alongside her without giving her a directive when I knew she was off base with her suggestions.

At the end of the coaching cycle, I was able to remain objective about the data received from the coaching cycle. During the focus group interview, I remained silent as the teacher-participants provided their answers to the questions as I did not want to interject my own feelings into the conversation. Even though I was an insider throughout the planning and implementation phase of the coaching cycle, I feel that I had to provide

some of my voice during the coaching cycle. However, at the end of the coaching cycle, the teachers were provided a survey and I was able to step back into my outsider role and not contribute to the data collection. The evidence provided by the teacher-participants was relevant to the study and it was clear that the teachers felt more confident about implementing PBL in their classrooms. The data showed that teacher-participants needed more time in a coaching cycle and I as the Instructional Specialist needed to plan for that to happen. I am confident that the data received from this action research study will have an impact on how all teachers at MHS view professional development which will eventually lead to better PBL implementation in the school.

Developing an Action Plan

Mertler (2014) states the developing stage occurs when results are analyzed, interpretations are made, and conclusions are drawn to formulate a plan of action for future studies. As we concluded our time together in the coaching cycle, the teacher-participants and I discussed what we learned from this action research study. One of the major takeaways was the amount of time we had together was lacking. Each participant felt we needed to work together more than two days a week and one class period per day. We also learned that we needed to start the project planning process earlier in the coaching cycle. Each participant believed the student-centered coaching model was an effective professional development model, however, there are parts to the model that need modification. These modifications led to the development of key questions to consider. Aspiring to answer the aforementioned questions led to the development of an action plan for future study.

The Action Plan

Based on what was learned from this action research study, the developing phase lends itself to the teacher-researcher asking the following question, "Based on what I have learned from my study, what should I do now?" (Mertler, 2014, p. 211). It was evident from the data analysis, the way in which professional development is provided as a means of support for teachers at MHS needs to change. The teacher-participants enjoyed the student-centered coaching model because they were learning in a smaller setting that was targeted to their content area. I believe the use of student-centered coaching a valid way for me, as the Instructional Specialist, to begin supporting all of the teachers in this PBL school. The teachers in this action research study expressed how supported they felt and how safe they felt asking questions because the coaching was for a smaller group.

Addressing the aforementioned questions as a plan of action is the goal and the coaching cycle will begin earlier in the planning phase and daily coaching sessions will be added to the methods. Because the plan will be more focused and increases coaching time, the next cycle of study needs to take on a team approach. Including the school's Instructional Coach and Principal as an instructional team will allow for more teachers to receive targeted support. In order to effectively implement this action plan, consultations with the school's New Tech Network coach will be required for the team not only to ensure PBL best practices are being supported, but the team has a support system as well.

Phase One. A new coaching cycle will take place during spring of 2019, two weeks prior to the classes starting a new project. This will ensure that the instructional team can meet with their assigned teachers prior to project launch and participate in the

project planning. Each instructional team member will have their own teacher or pair of teachers to support until the project ends. Data will be collected through surveys at the end of the coaching cycle but also will include student pre-test and post-test data. With the help of the school's New Tech Coach, the administrative team will develop an observation tool that includes specific "look-fors" for PBL implementation. Assistant principals will observe the classrooms using the observation tool of the teachers in a coaching cycle and will provide feedback to determine effectiveness of classroom instruction. The anticipated timeline for this coaching cycle will be from 6 to 8 weeks depending on how long the project goes. This creates an ending in late February or early March of 2019. As coaching teams, the observations will be analyzed and reflected upon and the data will be used to assist the instructional team with the coaching cycle.

Phase Two. It is imperative for the instructional team to build capacity amongst teachers in order to ensure PBL implementation is understood by all teachers in the building. The teacher-participants in the action research study voiced in the focus group interview that they preferred professional development to take place in a smaller group setting. Keeping that in mind, the instructional team will develop a professional development series for the department chairs in the building that will begin in late February 2019. Jacobson, Brooks, Giles, Johnson, and Ylimaki (2007) share that effective leaders in high poverty schools develop people and aspire to create shared goals amongst its organizational members. Additionally, effective leaders in these type of settings seek out individuals that they can count on to be role models in the building and do so by stimulating their intellect but supporting them along the way. In order to foster an environment where leadership is shared, this professional development series will

include nine teachers where they will participate in their own coaching cycle. The Instructional Coach, Principal, and Instructional Specialist will develop a PBL simulation where each department chair will have the opportunity to be a student in the instructional team's PBL classroom. The department chairs will have the opportunity to develop their own authentic learning experience for their students, implement the experience in the classroom, and receive coaching from the instructional team as they do so. At the end of this coaching cycle, each department chair will complete a survey on their feelings of the coaching cycle and their comfort level of PBL implementation. These teachers will also investigate the instructional needs of their departments and an action plan for addressing those needs. The goal would be for these teachers to provide additional coaching for the teachers in their department on PBL implementation for the remainder of the school year. All teachers will take a survey to determine the effectiveness of the new professional development model and a new needs assessment for instruction.

Phase Three. After spending time providing professional learning opportunities and collecting observation data, the instructional team will meet with the department chairs in June of 2019 to analyze the data and needs assessment. The team would determine what steps need to be taken for the 2019-2020 school year as it relates to professional development. Teachers needing more targeted support will be assigned to an instructional team member to receive a coaching cycle at the beginning of the school year. Additionally, department chairs will plan learning experiences for their own departments.

Phase Four. Mertler (2014) expresses that there can be a gap between the act of conducting research and disseminating the results with educators in the field. Being a

part of the New Tech Network, MHS is a part of a network of over 100 schools. Several of the schools in the network have a similar demographic and encounter the same instructional needs as MHS. In order to connect with other schools implementing PBL curriculum models, the results of this data will be shared at the New Tech Network's annual conference in July 2019. A 90-minute interactive session will be prepared by MHS's instructional team for other instructional teams of PBL. During this session, teams will be able to explore their own schools' current reality, understand the coaching cycle process, learn how to empower teacher leaders in their schools through coaching cycles, and create their own action plan for implementing coaching cycles as a professional development model in their schools.

Facilitating Educational Change

Jensen (2009) declares children growing up in impoverished environments are often victims to chronic stress and these high loads of stress often lead to serious health, behavioral, and cognitive issues. Working in a school where all students are considered to be living in poverty and teachers are challenged not only by student academic deficits, behavior outbursts, and attendance issues, but are also overwhelmed by the process of implementing a project, I must use the best methods possible to support teachers. In this action research study, I was able to gain an awareness of what teachers go through as they are planning and implementing a project in our school. During the eight week coaching cycle, the four teacher-participants and I engaged in deep conversations about determining the purpose of the project and how we were going to know the students could articulate that purpose. I was also privy to some of the obstacles the teachers face when it comes to student deficits in the classroom. There were several students during

the eight-week study that were suspended or chronically absent and it was difficult to determine how to keep those students' interest in the project. Additionally, there were several students in each classroom who were unable to articulate what they had read in the assigned text. As a team, we had to find scaffolding strategies to ensure those students were not left behind in the project.

In order for me to be a change agent in the building, it is imperative that I participate in another coaching cycle with a different group of teachers. By doing so, I gain even more insight on what teachers need as they implement projects with our students. Sweeney and Harris (2017) provide the framework for using student-centered coaching as means of partnering with teachers to focus on data and using the work produced by students to make instructional moves in the classroom. Following this type of professional development model falls in line with what Reeves (2003) defines as a high achieving high poverty school. Schools that meet this criterion focus on student progress and use assessment data to make improvements in student achievement. Following the model of Sweeney and Harris (2017) to create professional learning opportunities for adults helps to create an environment where teachers are focused on achievement, which in turn changes the culture of the school and the makes for a better learning environment for our students.

If I can assist teachers with building exceptional projects through the use of Sweeney and Harris' (2017) model that meet our students' needs, not only will the teachers feel better equipped to create and implement projects on their own, but students will also be engaged in deeper learning. Noguera, Darling-Hammond, & Friedlaender (2015) state

> "To the degree that deeper learning remains unavailable to students of color and children of low-income families, America will never be able to solve its equity dilemma. The evidence is clear: students will only acquire the skills to be truly college and career ready if they have access to a higher-level curriculum." (p. 10)

With the growing manufacturing industry in the school's area, it is necessary for our students to participate in deep learning opportunities so that they are prepared for this type of work. As the Instructional Specialist in the building, I am the person the teachers rely on for support, guidance, and PBL expertise. Creating a professional development model where teachers acquire those things from a whole team of experts and learn how to create deeper learning opportunities for our students is beneficial to all stakeholders in the building. We as a school community will create an equitable learning environment for our students.

Mills (2007) shares the challenges researchers face while aspiring to facilitate change through action research. One of the challenges mentioned was resistance. He states "Any type of change, however small, may be viewed as threatening by some" (p. 152). Implementing PBL causes a teacher to have to change their thoughts on how to educate students. Based on the results of this study, implementing coaching cycles where teachers learn in a small group setting and grow in their PBL implementation will make the change less threatening.

Having completed one coaching cycle with a group of four teachers, there are several other teachers who are asking for a coaching cycle. I plan to work with another group of teachers in the spring of 2019 and adjust the amount of time I spend with them. Additionally, starting with those teachers will hopefully create a community of learners

where teachers will talk to each other about their projects and take what they are learning in the coaching cycle and help each other. Secondly, providing a coaching cycle for departmental leaders to deepen their understanding of PBL and empowering them to coach teachers in their department is another way to I plan to facilitate change at MHS. I truly believe that the project-based learning model is a best practice to implement in a high poverty school. My action research study proved that coaching cycles are a best practice for developing teachers to implement the model. I feel that the action plan I have created will ensure that all teachers feel supported, teacher leaders are developed, and as a result, our students will benefit from the deeper learning experiences PBL has to offer.

Summary of Research Findings

Four teacher-participants engaged in a coaching cycle for their first project implemented in the fall semester of 2018. The coaching cycle was grounded in the work of Sweeney and Harris (2017) and modeled the student-centered approach to coaching. The project involved students creating a TedTalk addressing effective habits teenagers can implement in their daily lives. The findings of this action research study show the need to create better professional development strategies for teachers implementing PBL at MHS. The results of the study included three research findings.

Research Finding One. Teachers enjoy having professional development that is provided in a small group setting. Teachers also enjoy having professional development that is specific to their content needs and applicable to their own classroom. Darling-Hammond et al. (2017) state effective professional development is "structured professional learning that results in changes in teacher practices and improvements in

student learning outcomes" (p. 2). Additionally, professional development is content-focused, requires active learning for adults, and supports collaboration. This action research study provided an effective method that the teachers felt was engaging, specific to their needs, and supportive.

Research Finding Two. As the Instructional Specialist providing professional learning for teachers at MHS, it is imperative to start a coaching cycle when teachers are in the beginning phases of project planning. It was very clear that in order for the students to have a clear picture of the goals of the project, the teachers must have an even clearer picture of what problem they want the students to solve as a result of project participation. Planning the project's authentic problem and attaching that problem to specific standards-based learning goals is the start of creating an engaging and authentic learning experience for students.

Research Finding Three. In order to create an experience for students that is project-based, the coaching cycle needs to include the coach planning and co-teaching with teachers more than two days a week. Additionally, the coach needs to spend an entire day with the teacher teams. Student-centered coaching involves the use of student data and student work to drive instruction (Sweeney & Harris, 2017). If the coach is able to stay for an entire day, the student work can be analyzed after each class period and plans can be adjusted quickly. By having a day or two in between coaching sessions, too much time has passed to make a judgement about what instructional strategies need to be employed in order to improve student understanding of content. If more time is spent during implementation, teachers may acquire a better understanding of how to truly use student work to drive instruction within a project.

Suggestions for Future Research

This action research study began in the fifth year of project-based learning (PBL) implementation for Monarch High School. I set out to determine teacher perceptions of the use of a student-centered coaching model as a means of professional development. As a result of the action research study, the four teacher-participants appreciated learning in a small group setting and felt they were more prepared to implement PBL in their classroom. Even though this action research study was a success on a small scale, future research studies could provide even more insight on how to work with teachers and prepare them to teach in this type of setting.

It would be beneficial to study the impact of student-center coaching on student End-of-Course test results in English 1. Since the teacher-researcher has created a working relationship with the four teacher-participants, it would be beneficial to continue the coaching cycle for one full school year to determine how student achievement changes as a result of the coaching. Additionally, it would be interesting to study how students perceived their PBL experience as a result of student-centered coaching. With student achievement data and student perceptions, the instructional team would have more information on how to provide professional learning experiences for teachers in this high poverty setting. Spending an entire school year would not only address some of the key questions that came out of the original action research study, but the teacher-researcher would have the opportunity to learn and grow with the teachers for an entire school year.

Conclusion

This chapter details the focus of this action research study and provides an in-depth action plan in order to improve professional learning for adults teaching at Monarch High School. Four teacher-participants prepared a PBL experience where 9th grade students in an integrated English 1/Integrated Business Applications course were tasked to create a TedTalk on effective teen habits. The four teacher-participants were all in their second year of PBL implantation and the teacher-researcher partnered with them to implement the project in the classroom. Coaching sessions occurred twice a week and the teacher-researcher co-taught and observed each classroom twice a week. The teacher-participants felt that the coaching model was beneficial and other teachers in the building should participate in at least one coaching cycle during the school. As a result of the action research study, the research question was answered with teachers perceiving the student-centered coaching model as a success.

After the conclusion of the study, many key questions came to the surface and warranted the teacher-researcher to create an action plan with the teacher-participants that would include more teachers benefiting from the small group professional development. The action plan requires a team approach including the Principal and the Instructional Coach. The action research study also implies further studies to take place in order for the instructional team to understand how to better support teachers with PBL implementation. Miller (2018) shares that planning for a PBL experience takes lots of time and effort in order to make the learning authentic and student-centered. After a project is launched with students, it may be difficult for a teacher to determine where the

students will take the learning. When teachers have the support of an instructional team, the day-to-day planning may become less of a daunting task.

This action research study showed that these four teachers learned best in a small group setting where they had targeted support in their content area. In a PBL classroom, the teacher is more than just a provider of information, but they are a part of the student's journey to learning (Berkeley, 2017). I feel that the coaching cycle mimics this philosophy. Throughout the entire process, I was a part of the teacher's journey and it was rather rewarding to see how the four-teacher participants grew in their understanding of PBL in just eight short weeks. If given the opportunity to further the research, I am sure the growth in these four teachers would be exponential.

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APPENDIX A

INVITATION LETTER

Dear Digital Literacy Team,

My name is Wanda Littlejohn. I am a doctoral candidate in the education Department at the University of South Carolina. I am conducting a research study as part of the requirements of my degree in Curriculum Studies and I would like to invite you to participate.

I am studying the impact of student-centered coaching on the implementation of project-based learning. If you decide to participate, you will be asked to participate in a focus group interview, meet with me to plan throughout the duration of the project, co-teach with me and be observed by me, provide a post-test to students at the end of the project, and complete a survey about the coaching model at the end of the project

During the focus group interview, you will be asked questions about goals for student learning, how we can make the project relevant and purposeful for students, and how we can informally assess students and address weaknesses throughout the project. The interview will take place at a mutually agreed upon time and place and should last about 60 minutes. The interview will be audio recorded so that I can accurately transcribe what is discussed. The audio will only be reviewed by me and will be destroyed upon completion of the study. The goal of our time together will be to plan for student learning but if you feel uncomfortable, you do not have to answer any questions that you do not wish to answer.

Participation is confidential. Study information will be kept in a secure location at the University of South Carolina. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

Since our initial meeting is a focus group session, others in the group will hear what you say, and it is possible that they could tell someone else. Because we will be talking in a group, we cannot promise that what you say will remain completely private, but we will ask that you and all other group members respect the privacy of everyone in the group.

You will receive a $25 gift card for participating in the study.

I will be happy to answer any questions you have about the study. You may contact me at 803-270-4761 or at wlittlej14@gmail.com or my faculty advisor, Dr. Susan Schramm-Pate, 803-777-3087, drsusanschramm@gmail.com.

Thank you for your consideration. If you would like to participate, please sign the consent form provided.

With kind regards,

Wanda N. Littlejohn

214 Bellport Drive

Greenville, SC 29607

803-270-4761

Wlittlej14@gmail.com

APPENDIX B

CONSENT FORM

Consent to Participate in a Research Study
University of South Carolina ● Columbia, SC

Title of the Study: The impact of intense coaching on the implementation of project-based learning: An action research study

Investigator: Wanda Littlejohn **Dept:** Curriculum Studies

Introduction

- You are being asked to be in a research study on coaching in project-based learning.
- You were selected as a possible participant because you are a team of four teachers integrating content to create projects. Each participant has less than three years of experience implementing project-based learning as a curriculum model and some are relatively new to the teaching profession.
- I ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

- The purpose of the study is to determine the impact of intensive coaching of teachers on their ability to plan projects and provide purposeful scaffolding tasks during the implementation of project-based learning.
- Ultimately, this research may be published as a part of a dissertation, presented in a research paper, or presented to a group of educators.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things:
  - Participate in a focus group interview lasting approximately 60 minutes
  - Plan with and co-teach with the researcher
  - Receive observation feedback during the coaching cycle
  - Provide a post-test for students
  - Complete a survey on the impact of the student-centered coaching model

Risks/Discomforts of Being in this Study

- There are no reasonable foreseeable (or expected) risks. There may be unknown risks.

Benefits of Being in the Study

- The benefits of participation include
  - An increase in collaboration between co-teachers
  - An increase in background knowledge on the purpose and structure of project-based learning
  - An increase in knowledge of implementation strategies of project-based learning

Confidentiality

- The records of this study will be kept strictly confidential. Your identity will not be disclosed in the material that is published. During the research phase, records will be kept by the investigator in a secure file. All audio tape recordings will be kept by the investigator and will be used for educational purposes only. You may have the opportunity to review any material before the research is published. After the research is published, all audio tape recordings, observation records, and journal notes will be kept by the investigator in a secure location and will be destroyed one year after publication.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study. Your decision will not result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Wanda Littlejohn at wlittlej14@gmail.com or by telephone at 803-270-4761. If you like, a summary of the results of the study will be sent to you.

Consent

- Your signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the study investigators.

Subject's Name
(print): _____

Subject's
Signature: _____ Date: _____

Investigator's
Signature: _____ Date: _____

APPENDIX C

FOCUS GROUP INTERVIEW

Focus Group Guiding Interview Questions

1. You all have spent one year implementing project-based learning. What are your thoughts on the professional development you have received?

2. What do you feel you have gotten out of your professional development experiences?

3. How has the professional development influenced your teaching practice?

4. What do you think the professional development you have received on implementing project-based learning has lacked?

5. What would you want your professional development experiences to look like?

APPENDIX D

FIELD NOTES CHART

Observation Number/Date	**Goal for Student Learning**	**Observations/ Evidence**	**Comments/Personal Reflection**

APPENDIX E

COACHING SESSION LOG

Teacher Participant Group #:			**Date:**	
Coaching Session Focus:				
What is the student learning goal for this portion of the project? What data is this goal based on?	**What instructional practices will be used to most likely produce the desired student learning goal?**	**How will we connect these instructional practices to the purpose of the project?**	**What are our roles as we implement this portion of the project?**	**How will we know the students met the desired learning goal?**

APPENDIX F

TEACHER REFLECTION SURVEY

Teacher Reflection Survey

The purpose of this survey is for you to help the Instructional Specialist determine the effectiveness and impact of the student-centered coaching model. For each statement below, please circle the number, using the code below, that describes how much you agree with each statement. Please respond to each statement as honestly as you possibly can and by only circling one number for each statement.

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

1. My teaching was positively impacted during the coaching cycle. 1 2 3 4 5
2. The collaboration with my coach worked well for me. 1 2 3 4 5
3. My knowledge of project-based learning implementation has increased as a result of the intensive coaching. 1 2 3 4 5
4. All teachers should be involved in at least one intensive coaching cycle per school year. 1 2 3 4 5
5. The collaboration positively impacted the students. 1 2 3 4 5
6. I have a better understanding of how to scaffold and assess students during a PBL unit. 1 2 3 4 5
7. My students met my goal for learning during the implementation of this project. 1 2 3 4 5
8. My students were able to articulate the purpose of their assigned task throughout the project implementation. 1 2 3 4 5
9. My students' weaknesses were adequately addressed during this project. 1 2 3 4 5
10. The amount of time spent with the coach was adequate. 1 2 3 4 5

Open Response Questions

1. What are your thoughts on the student-centered coaching model as a means of professional development for teachers implementing project-based learning?

2. Would you recommend other teachers going through the coaching cycle? Why or why not?

3. Has your definition of authenticity in PBL changed as a result of the coaching cycle? If so, how?

4. Has your understanding of PBL changed as a result of the coaching cycle? If so, how?

APPENDIX G

CRITICAL FRIENDS PEER REVIEW

This peer evaluation activity can be used as either a midway feedback opportunity for longer projects or as a final assessment for shorter projects. The process forces students to practice their listening skills and provides a safe means for peer evaluation. Each phase can take from 5-10 minutes so plan accordingly. Form teams of 3 or 4 groups who will present to each other.

PHASE ONE: Presentation (5 minutes)

Presenting Group: Describe their product, standards and phases of their project.

Critical Friends: Friends remain silent. They are not allowed to ask clarifying or follow up questions. They should be taking notes and using the Six A's rubric to evaluate the product as it is presented.

PHASE TWO: CLARIFICATION (1 minute)

Critical Friends: Friends ask the presenter clarifying questions if necessary or give friends time to process the presentation.

PHASE THREE: Critique

Presenting Group: Presenter(s) remain silent and are not allowed to respond to the comments of the "Friends."

Critical Friends: Friends talk amongst themselves about the project as if the presenters were not in the room and use the phrases below to start each topic. Start by focusing on the strengths, then on suggestions for improvement, and lastly, ideas for "next steps."

I like the fact that... (2 minutes)

I wonder if... (2 minutes)

A next step might be... (2 minutes)

PHASE FOUR: Response (1 minute)

Open discussion period for presenter(s) to respond to the comments of the "Friends" and to follow up on ideas or suggestions.

APPENDIX H

NTN PROJECT PLANNING TOOLKIT

Project Title: **The 7 Habits of Highly Effective Teens**

Authentic Problem or Issue addressed in the project (What is the scenario that will guide student inquiry throughout the project?): Creating habits that will provide a solid foundation for success in high school and beyond.

Knowledge and Skills Addressed in the Project:

Learning Outcome	Domain/ Standard	Indicators	Learning Target
Knowledge & Thinking	Language Standard 5 Lang., craft, and structure Standard 9 RI 1-4	5.2 Use: a. A semicolon or a conjunctive adverb to link two or more closely related independent clauses; b. A colon to introduce a list or quotation; and c. Commas to separate adjacent, parallel	Student will be able to: ● Use a semicolon to separate two independent clauses ● Use a colon to introduce a list or quotation ● Use commas in sentences in the correct places

		structures.	Student will be able to: ● Identify false reasoning or distorted evidence while listening to a speaker ● Identify if a speaker uses ethos, logos, and pathos effectively ● Identify where a speaker uses repetition, rhetorical questioning, and delivery style to their advantage when trying to convey messages that impact
	Language, Craft, and Structure Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages. Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	8 4.1 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacies in reasoning or exaggerated or distorted evidence. 4.2 Determine if the speaker develops well-organized messages that use logical, emotional, and ethical appeals. 4.3 Analyze the speaker's use of repetition, rhetorical questions, and delivery style to convey the message and impact the audience.	Students will be able

		1.1 Gather information from print and multimedia sources to prepare for discussions; draw on evidence that supports the topic, text, or issue being discussed; and develop logical interpretations of new findings. 1.2 Initiate and participate effectively in a range of collaborative discussions with diverse partners; build on the ideas of others and express own ideas clearly and persuasively. 1.3 Develop, apply, and adjust reciprocal communication skills and techniques with other students and adults. 1.4 Engage in dialogue with peers and adults to explore meaning and interaction of ideas, concepts, and elements of text, reflecting,	to: ● Find and gather information to use for a final product ● Build on ideas by participating in a collaborative discussion ● Engage in dialogue with other students and adults ● Synthesize information to use for a product ● Use different modes of communicatio n

	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages. Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	constructing, and articulating new understandings. 1.5 Synthesize areas of agreement and disagreement including justification for personal perspective; revise conclusions based on new evidence. 1.6 Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives. 5.1 Remain conscious of the audience and anticipate possible misconceptions or objections. 5.2 Employ effective repetition, rhetorical questions, and delivery style to convey message to impact the audience. 5.3 Develop messages that use logical, emotional, and ethical appeals.	Students will be able to: ● Be conscious of their audience and anticipate objections ● Employ repetition, rhetorical devices, and use a delivery style that

		2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources; c. organize complex ideas, concepts, and information to make connections and distinctions; d. assess the credibility and accuracy of each source; f. develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; g. quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation; h. develop and strengthen writing as needed by planning, revising,	will impact an audience ● Use ethos, pathos, and logos in presentations Students will be able to: ● Introduce a topic in their writing ● Use relevant information in their writing ● Organize their idea ● Assess source credibility

	B. EMPLOYABILITY SKILLS	editing, rewriting; i. use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts; j. use precise language and domain-specific vocabulary to manage the complexity of the topic; k. establish and maintain a consistent style and objective tone while attending to the norms and conventions of the discipline; and l. provide a concluding statement or section that follows from and supports the information or explanation presented. 1. Identify positive work practices (e.g., appropriate dress	

		code for the workplace, personal grooming, punctuality, time management, organization). 2. Demonstrate positive interpersonal skills (e.g., communication, respect, teamwork).	The student will be able to: • Dress professionally, practice good hygiene, punctuality, conversation/interview skills, time management, and organization.
Collaboration **EQUAL PARTICIPATION** **EQUAL PARTICIPATION**	• Shares ideas, and explains the reason behind them • Acknowledges others' thinking • Allows for equal participation by both sharing ideas and listening to the ideas of others	• Provides ideas or arguments with convincing reasons • Builds on the thinking of others • Encourages equal participation by asking clarifying or probing questions, paraphrasing ideas, and synthesizing group thinking	• Acknowledges the strengths and limitations of their ideas • Builds on the thinking of others and checks back for agreement • In addition to target, actively invites others to participate equitably, promoting divergent and creative perspectives

Agency **USE OF EFFORT & PRACTICE TO GROW** **(WORK ETHIC)**	Superficially connects effort and practice to getting better at a skill, improved work quality, or performance	Understands how effort and practice relate to getting better at skills, improved work quality, or performance	Understands that effort and practice improve skills, work quality, and performance and that the process takes patience and time
Oral Communication CLEAR PRESENTATION OF IDEAS	Communicates ideas clearly most of the time, occasionally ideas are difficult to follow	Communicates ideas clearly	Communicates ideas clearly, adjusting as needed to enhance clarity for audience
Written Communication LANGUAGE USE AND CONVENTIONS	Has some minor errors in grammar, usage, and mechanics that partially distract or interfere with meaning	Is generally free of distracting errors in grammar, usage, and mechanics	Is free of distracting errors in grammar, usage, and mechanics

Entry Event Stirs up excitement in the students, describes the task and product, gives students clues to spark need-to-knows, includes more than a written document	Watch a Ted Talk Student speaker from upper-classmen: one student will be chosen to speak on common mistakes made in high school that can be avoided from the onset. Youtube videos: how high school students get on the wrong track. What do those problems look like? How can they be avoided? Also videos on students that have traveled on a productive path? What did they do? What habits were established? Quiz/Assessment: possible help from guidance office - allow students to rate themselves on their habits at this present time. What is good? What can be improved upon? Setting improvement goals, and coming up with a system to self monitor daily.
Driving Question Overarching question that will guide student learning throughout the project	How will I establish habits to be a highly effective tween/teen in high school?
Authenticity Students connecting to the community, experts, and professionals in authentic ways and using sources that are authentic to the discipline and	Students will create a Ted Talk that will be given to students at our school (the juniors are also working on these concepts). Students will present their Ted Talks to members of the community or publish them on Youtube or Teacher Tube on a channel created by instructors.

the task	
Problem Question or Statement Role, task(s), purpose (To be completed after the project launch)	How can we…as Carolina freshmen students Do…create productive habits So that…we can succeed to the best of our ability and reach our highest potential. OR We are… Who will… So that...
Individual Assessment of Knowledge & Thinking (Individual, Written Performance Assessment):	Literacy Task or Career Readiness Assessment Prompt: Will be the post assessment
Culminating Products Be sure to allow for student voice and choice in the products.	Presentation / Performance: Ted Talk created by student groups on one of the habits Artifact(s): Video or live performance Audience: Juniors in Deuerling/Egan's class - Youtube or Teacher Tube - community members
Post-Assessment Connects the content and skills learned in the project to the course diagnostic assessment	How can I use each of the 7 Habits to become more productive, and more well rounded as an individual? Grammar and usage post test.

Project Phases

Consider the sequence of learning that will likely take place based on anticipated student need-to-knows and skill development. Brainstorm possible scaffolding activities along the way and consider project benchmarks that can help students to stay on track and focused on the end products, while also allowing you to assess their development towards the learning targets. Determine what weaknesses and/or skills instruction will need to occur "alongside" the project.

Project Launch	*Scaffolding*	*Benchmark 1*	*Scaffolding*	*Benchmark 2*	*Scaffolding*
		Writing	***Grammar wkshts***	***Interviewing***	***Videos of interviews***
			Fix its		***Questioning techniques***
			Proper nouns		***How to ask the right questions***
			Oxford commas		***Voice volume speed, enunciation, and inflection***
			Parts of speech- predicates, nouns,		

Benchmark 3	*Scaffolding*		*Scaffolding*	*Final Product/ Presentation*	*Reflection/ Assessment*
Speaking	***Voice volume speed, enunciation, and inflection***		***Different kinds of sentences***		
	Body language		***Numbers***		

	Finding your voice	*Possession*	
	Knowing your audience	*Verb Tense*	
	Ethos, pathos, logos	*Prepositions*	

P ar

	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
Week One	*Prediagnostic assessment for English 1*	*Prediagnostic assessment for English 1* *Prediagnostic assessment for TDA* *(text dependent analysis)*	*Entry Event: The line game given scenarios of good and bad habits* *Watch TED Talks that will show the students what they are aiming for in their final product* *Upperclassmen come visit the class to address good and bad habits of high school students*	*Quiz - guidance* *Set goals, and self monitoring criteria* *RUBRIC* *LITERACY TASK:* *Read Who Am I & Get in the Habit*	*LITERACY TASK PART 2: Read Paradigms and Principles* *Writing Task: Assess your own habits, paradigms, and principles*

Week Two	*LITERACY TASK PART 3: read The Personal Bank Account* *Start vocabulary Unit 1* *Pre-assess for skills with punctuation & grammar*	*KNOWS AND NEED TO KNOWS* *GROUP CONTRACTS* *PROBLEM STATEMENTS* *NEXT STEPS*	*BENCHMARK 1: WRITING AN EFFECTIVE ARGUMENT WITH PROPER GRAMMAR PUNCTUATION*	*PUNCTUATION* *PROPER NOUNS* *CAPITALIZATION* *SENTENCE STRUCTURE*	*VERB TENSES* *MORE PUNCTUATION* *FORMATIVE ASSESSMENT ON LESSONS FOR THE LAST TWO DAYS*
Week Three	*PARTS OF SPEECH* *VARYING SENTENCES* *Numbers* *Possession* *Verb Tense* *Prepositions*	*SUMMATIVE ASSESSMENT FOR PREVIOUS LESSON* *WORKSHOP: How to outline text* *EACH GROUP ASSIGNED ONE OF THE SEVEN HABITS - review all - read thoroughly the assigned chapter & outline*		*WORKSHOP: MLA formatting/Notes protocol* *Go back to your three sources and decide what information will be used as part of your Ted Talk - be sure to note where that information has come from*	*SUMMATIVE ASSESSMENT: MLA formatting* *WORKSHOP: Ethos, Pathos, and Logos/Who is my audience/ Remaining in touch with your audience* *Go back to notes and mark each with either ethos, pathos, or logos*

Week Four	***Modeling of draft of Ted Talk*** ***Students begin to draft their Ted Talk*** ***WORKSHOP: Interviewing - how to ask the right questions appropriate to who is being interviewed***	***Prepare group questions for interviews*** ***Review at least two people in the building*** ***Interview at least two people at home or out in the community***	***WORKSHOP: Working interviews into my Ted Talk/Using my vocabulary words in my Ted Talk*** ***Writing: adding to my Ted Talk***	***Watching interviews and evaluating their effectiveness as a speaker*** ***Writing: adding to my Ted Talk/ How can I give my audience value and entertain them in order to keep their attention?***	***Rough draft of Ted Talk due*** ***WORKSHOP: Revising your writing*** ***Impromptu speeches***
Week Five	***WORKSHOP: Speaking skills*** ***Stations for practice:*** ***Voice*** ***Volume*** ***Speed*** ***Inflection*** ***Enunciation***	***Ted Talk: Finding your voice*** ***WORKSHOP: Finding your voice & knowing your audience***	***Practice talks and evaluate other members of the class***	***Ted Talk video taping***	***Present Ted Talks to the juniors***

Project Rubric (Student Friendly)

	Developing	Proficient	Advanced
Knowledge & Thinking	• Is able to identify the concepts of ethos, pathos, and logos	• Is able to explain the concepts of ethos, pathos, and	• Is able to give concrete examples of ethos, pathos, logos • Dresses professionally for

	• Dresses school appropriate, but not professionally for presentations • Fair to moderate hygiene • Is sometimes punctual • Sometimes practices time management • Organizational skills are still developing	logos • Dress semi-professionally for presentations • Practices good hygiene • Is usually punctual • Good time management skills • Good organizational skills	presentations • Practice excellent hygiene • Is always punctual • Advanced time management skills • Advanced organizational skills
Agency	Superficially connects effort and practice to getting better at a skill, improved work quality, or performance	Understands how effort and practice relate to getting better at skills, improved work quality, or performance	Understands that effort and practice improve skills, work quality, and performance and that the process takes patience and time
Collaboration	• Shares ideas, and explains the reason behind them • Acknowledges others' thinking • Allows for equal participation by both sharing ideas and listening to the ideas of others	• Provides ideas or arguments with convincing reasons • Builds on the thinking of others • Encourages equal participation by asking clarifying or probing questions, paraphrasing ideas, and synthesizing group thinking	• Acknowledges the strengths and limitations of their ideas • Builds on the thinking of others and checks back for agreement • In addition to target, actively invites others to participate equitably, promoting divergent and creative perspectives
Oral Comm.	Communicates ideas clearly most of the time, occasionally ideas are difficult to follow	Speech is between 2 and 5 minutes,	Communicates ideas clearly, adjusting as needed to enhance clarity for audience
Written Comm.	The speech contains 8+ spelling, grammar, usage, and/or mechanical errors. Additionally, the speech uses less than 5	The speech contains 4 to 8 spelling, grammar, usage, and/or mechanical errors. Additionally, the speech	Written speech contains 3 or less spelling, grammar, usage, and/or mechanical errors. Additionally, the speech uses 5 or more vocab words from the vocab book.

	vocab words from the vocab book	uses 5 or more vocab words from the vocab book.	

APPENDIX I

PROJECT LAUNCH DOCUMENT

Whew!... Can you believe it is almost progress report time?

We all have habits…some we would like to break and some that we have developed over time. Freshman year of high school is a critical time to start developing good habits to carry with you the rest of your life. What are some effective habits that can help you the best and most effective teen you can be? What are some ways that you can improve your habits? How can you best develop new habits? What would you say to other teenagers who are struggling with their own personal habit(s)? Which of these habits will you focus on during your TED Talk? How will your group break up the task of knowing all of the habits?

TED Talk… Technology, Education, and Discovery. The primary topic of conversations of the past few weeks of school have revolved around TED Talks. We have watched several videos and have seen the various delivery methods of what makes a good TED Talk. How to develop ethos, pathos and logos are a key component to consider when you are designing the idea for your own personal TED Talk. What would be a good hook? How do you convince people to see your point? How should you speak? Are you speaking loud enough? Are you portraying the right type of body language? What is your tone? Do you enunciate? Is it casual or more formal? Is it serious by nature or more laid back? How can you create your own voice and style to your topic to make it uniquely your own?

In order to deliver a speech, you must first write it down. There will be grammar, punctuation, and spelling errors (Notice the Oxford Comma use??) the first time through. We will revise, reword, and rewrite to be able to deliver a TED Talk. Your group has a contract that each member signed. This is to hold each of you accountable throughout the project. You and your group members are there to lift each other up, offer suggestions, and help guide one another through to the finish of the project.

Are you ready?